CANCER NUMBER

CLINICAL MEDICINE AND SURGERY

CMS

VOLUME 41 March, 1934 NUMBER 3

• LEADING ARTICLES •

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Published monthly by the AMERICAN JOURNAL OF CLINICAL MEDICINE, INC., Room 670, 410 N. Michigan Ave., Chicago, Ill.; subscription price $3.00 a year (foreign, $4.00). Entered as Second Class Matter January 10, 1927, at the Postoffice at Chicago, Illinois, under the Act of March 3, 1879.

LEWIS STEPHEN PILCHER, M.A., M.D., LL.D., F.A.C.S.

(The biographical editorial in this issue appears on page 110.)

CLINICAL MEDICINE AND SURGERY

GEORGE B. LAKE, M.D.
• *Editor* •

Vol. 41 MARCH, 1934 No. 3

EDITORIAL

An Independent Journal

THE history of CLINICAL MEDICINE AND SURGERY is too well known to most of our readers to require more than casual mention. Inaugurated more than forty years ago, as a mouthpiece for the dynamic Dr. Wallace C. Abbott and a medium for promulgating the idea of active-principle therapy in the United States, it passed, under the successive editorships of Dr. A. S. Burdick and Dr. H. J. Achard, through the various stages of emergence from the class of periodicals of propaganda and, under its recent and present editorship, became, editorially, an independent journal, though it was still owned by the Abbott Laboratories, as it had been from its inception.

It now takes another step in its evolution and progress, with the acquirement, by its present editor and business manager, of its entire ownership, and becomes in form and in fact, as well as in editorial policy, with its complete separation from its former owners, a TRULY INDEPENDENT MEDICAL JOURNAL—the mouthpiece of no group or faction—whose sole purpose is the helping of the practicing clinician, by furnishing him, to the best of the editor's ability, with such material as will aid in making him a more competent and successful physician and a happier and more adequate all-around human being.

The editorial policy will not change, except as it grows and broadens, naturally. We still aspire to be, not merely another medical journal, but a real service to all our readers. We will still welcome helpful suggestions as to how we can make our pages more genuinely useful to clinicians, and shall be glad to have the assistance and support of all and sundry, hoping that our field of activity may grow steadily wider.

The new address of our main editorial and executive office will be Medical and Dental Arts Building, 307 Washington Street, Waukegan, Illinois, where we hope to hear from and meet our old and new friends as frequently and serviceably as possible.

Lewis S. Pilcher

Dean of Medical Editors

WHEN a surgical journal approaches the half-century mark, it is interesting. When one man has edited it during all that time, it is news.

That journal is *Annals of Surgery*, which is preparing to celebrate its golden anniversary next year, and that editor is Dr. Lewis Stephen Pilcher who, at the age of eighty-nine years, still sits in its *sanctum sanctorum*.

On July 28, 1845, at Adrian, Michigan, Phoebe Maria (Fisk) Pilcher presented her husband, the Rev. Elijah, with a son, and they called him Lewis Stephen. He may or may not have been a remarkable baby, but he began to show his unusual qualities when he matriculated at the University of Michigan at the age of thirteen years, took his Bachelor's degree in arts four years later and his Master's degree the following year (1863) and entered the School of Medicine. He still holds the record as the youngest matriculant and graduate of that institution.

Some precocious students never amount to anything else, but this was not such a case. The young medical student felt that his country, then in the throes of the Civil War, needed his services, and volunteered as a hospital steward in 1864. When it was over he went back to school, received his Medical degree in 1866, hung out his shingle as a country practitioner (ekeing out a living by teaching school) and read the Greek and Latin classics, in the original, for recreation.

But young (*very* young) Doctor Pilcher yearned for wider fields of activity, so he took an internship in a Detroit hospital, a post-graduate course in the hospitals of New York City, and was appointed assistant surgeon in the U. S. Navy in 1867. In this capacity he replaced the surgeon of the frigate "Saratoga," who died of yellow fever in Havana harbor in 1869; stayed with the stricken ship until it reached New York, with thirty-seven cases aboard; took the disease himself and nearly died of it; and retired from the Navy, to resume private practice, in 1872.

Until he retired from active practice, Dr. Pilcher was a successful surgeon. He was adjunct professor of anatomy in Long Island College Hospital from 1879 to 1882; professor of clinical surgery, New York Postgraduate Medical School; and attending or consulting surgeon to a number of hospitals.

In 1885, there being then no surgical journal in the English language, he decided to start one—*Annals of Surgery*—and assumed its editorship.

Hard work and honors have come freely to Dr. Pilcher, who is a fellow of the A. M. A. and honorary fellow of the American College of Surgeons, the American Surgical Association (past-president—1918) and the College of Physicians of Philadelphia. He has been president of the Medical Society of the County of Kings and of the New York State Medical Society, and is a member of many other professional organizations, as well as the author or co-author of several textbooks.

In 1900, his Alma Mater, and also Dickinson College, Carlisle, Pa., conferred upon him the degree of Doctor of Laws; in 1915 he was made surgeon general of the G. A. R.; and was elected commander-in-chief of that rapidly dwindling group of patriots in 1921.

Rich in knowledge, experience and that ripeness which comes only with advancing years, Dr. Pilcher is fortunate in being relieved of his more onerous editorial duties by his son, Dr. James Taft Pilcher, but we hope that the profession he has served so long and well may have the benefit of his wise counsels for many years.

The slaves of precedent are the men who call difficult things impossible.—ORISON S. MARDEN.

Cancer Cures

FOR many years, the medical profession and the public have been bombarded with more or less lurid announcements of non-surgical cancer cures, most of which have been pure bunk, and some of which have had a reasonable basis of logic and evident sincerity behind them, even though, after exhaustive clinical tests, they did not fulfill the hopes of their promulgators.

At present, the only methods for the treatment of cancer, which can properly be spoken of as curative, are surgery and radiation with radium or x-rays or both. But some of the medical measures which have been suggested have unquestionably been followed by surprisingly beneficial results in some cases, even though they failed in many others.

A generation or two ago, the idea of a cure for syphilis, diphtheria, tetanus or rabies

would have been considered ridiculous. Today they are facts. Is it wholly unreasonable to suppose that a medical cure for cancer will sometime be discovered—perhaps a century hence; perhaps tomorrow?

As the situation stands, we feel that our readers are entitled to information about any remedy for this terrible group of diseases which has a reasonably sound basis of scientific probability as a background. The chances are that, on searching clinical trial, these methods will prove disappointing; but no one can tell, offhand, when the successful one will appear.

We therefore ask our readers to remember that the mere fact that we publish an article does not necessarily mean that we indorse the suggestions or conclusions of its author; but only that, after going over it carefully, it appears to have been prepared in sincerity and to have enough scientific basis to bring it within the bounds of reasonable probability and make it worthy of experimental trial by those who are interested in clinical research.

In this class is the paper by Dr. Ishihara, in this issue. None of the highly scientific journals would be likely to publish it; and yet its author seems to have done some really serious work, and his ideas are not too fantastic. If he is wrong, we have simply given publicity to another mistake (in which we will have much good company); if he is right, it will be a joy to have been instrumental in bringing his work to the attention of American physicians, who ought to know what is going on, whether it proves to be right or wrong.

As to everything one reads, in this or any other publication, of whatever kind, the cold, dry light of reason must be turned upon it, before it is accepted or rejected.

An opinion is no more important than the person who holds it.—ROBERT QUILLEN.

Frozen Medical Credits

IN VIEW of the fact that the Government is extending financial aid to many groups of responsible persons (and to some who are not so responsible!), it occurred to the Lawyers' Club of Los Angeles, that some such assistance might well be given to the members of the medical and legal professions, not as a dole or charitable contribution, but as a perfectly sound business transaction, by means of which the money so advanced would be returned to the Government within a reasonable time.

The plan is to have a Federal agency prescribe a standard form of obligation, to be executed by the client or patient, payable in five years; to be limited to debts arising from bona fide professional service; to be endorsed by the practitioner; then to be discounted by the agency.

The doctors and lawyers spend freely in proportion to their incomes. A great deal of money would be put into very general circulation and the government would get most of it back. Their patients and clients, in the aggregate, are the solid, credit-worthy members of the community, who have needed professional service during the emergency. They need it now, but they find it all but impossible to get cash with which to pay. The practitioners of both professions cannot do their full duty to the public unless they have money to provide facilities and to provide for their dependents.

We commend this idea to the serious consideration of our readers, and suggest that those to whom it seems a reasonable and worthy project should write to their Senators and Representatives in the Congress, expressing that opinion, and should take measures to see that a set of resolutions, similar to that adopted by the Lawyers' Club, be passed by their county medical societies and forwarded to the men who represent such districts in the Congress. A copy of the resolutions in question appears in the department, "A Living for the Doctor," in this issue.

"Now" is the watchword of the wise.—CHINESE PROVERB.

Bacteria-Free Vaccine Virus

SMALLPOX vaccination is, relatively, one of the safest prophylactic procedures in general use. Infections are so rare as to be practically negligible. But the medical profession is constantly striving to make its methods as nearly one hundred percent efficient as is humanly possible; and there are still some people who, knowing how the virus is prepared—from healthy calves infected with vaccinia—object to having it used upon their children.

For these reasons, a report made by workers from the Vanderbilt University Medical School, at the meeting of the Society of American Bacteriologists, in December, 1933,

is of much interest. They have cultivated a bacteria-free vaccine virus on the chorio-allantoic membrane of ten- to twelve-day chick embryos and have harvested it in large quantities. The vaccine thus prepared may be preserved, fresh, glycerinated or dry, for long periods without appreciable loss of virulence.

A dermal strain of vaccinia virus has been maintained in the embryonic membranes during the past year and a half, through 100 successive generations, without intervening mammalian passage. This strain has apparently become stabilized in its virulence for the chick embryo, for rabbits and, so far as preliminary experiments have gone, for man.

Thirty-six persons have been vaccinated with various generations of the chick vaccine, including the latest or one-hundredth generation. These have been controlled by similar vaccinations with potent calf vaccine. The chick vaccine induces local lesions and general responses quite comparable with those induced by calf vaccine. The former are, in general, milder but run a course of equal duration and extent. Those vaccinated with chick vaccine have been revaccinated with calf vaccine and only immune reactions have resulted.

Before final conclusions relative to the immunizing effect of the chick vaccine in the human being can be drawn, it will be necessary to observe the relative duration of immunity in two series of cases, the one vaccinated with calf vaccine, the other with chick vaccine, over a considerable period of time. For this purpose a selected group of people has been placed at the disposal of these workers and will be studied for an extended period.

If this method works out satisfactorily, the production of vaccine virus will be much simplified, so that it can be furnished at less expense, and physicians will have at their disposal a product which will overcome the objections of all but the most ignorant and bigoted antivaccinationists.

To know is to live, and only as we live what we know do we truly comprehend.—SIDNEY A. COOK.

The Army for Safety and Recovery

IMMENSE amounts of our money are being spent in an effort to improve the economic and industrial prosperity of the nation; but even should these rather wild experiments succeed, what would it profit us if our national defenses are permitted to become so inadequate that we might become a prey to some greedy and ambitious nation?

Recent reports indicate that an effort is being made to build up our Navy; but this may turn out (as it has before) to be nothing but political "hot-air." We will be convinced of the sincerity of the effort when some of the new ships are in the water.

Meantime the Army continues to be, as it has always been, a step-child of the Government, because there is relatively little graft in it in peace times, and because the personnel is relatively small; is, to a considerable extent, disfranchised by the conditions of the service; and is forbidden, by Army Regulations, to indulge in any concerted (or even individual) political activity.

This is not an academic matter, of interest solely to professional soldiers, but a subject of vital interest to every citizen. Physicians especially, who are or should be leaders of public opinion in their communities, should consider the facts and prepare themselves to disseminate intelligent information. Moreover, many of them, being members of the Officers' Reserve Corps or the National Guard, have a deep personal interest in the subject.

The minimum force which can adequately perform the duties of the regular military establishment is 14,000 officers and 165,000 enlisted men (it should be fifty percent larger than that). To these should be added a National Guard of at least 210,000 officers and enlisted men, with provision for two weeks of field training and 48 armory drills each year, and an Officers' Reserve Corps of at least 120,000 officers, with provision for active-duty training of at least one-third of that number every year.

In addition to this, the R. O. T. C. students in our colleges should receive a subsistence allowance of thirty cents a day and efforts should be made to counteract the communistic influences which are striving to undermine the effectiveness and extent of this necessary training. Moreover, provisions should be made for training at least 50,000 men in the C. M. T. C. camps every year.

Money spent in these ways would go as far as any other form of expenditure in increasing purchasing power and prosperity; but because less of it would adhere to the sticky fingers of venal politicians, it will not be so spent unless large numbers of enlightened and determined citizens demand it.

As a matter of fact, why should not the army of workers now mobilized under the

C. W. A. and receiving millions of dollars of the people's money under conditions of unexampled political corruption, be drafted into the military establishment for a period of from one to three years? They would be much more effectively and economically controlled and directed; they would receive, in addition to the work they do, a training and discipline which would be of incalculable value to themselves, as well as to the Nation; and the financial expenditure (which must be provided for by taxation reaching, directly or indirectly, every citizen) would if anything, be less than it is under present circumstances.

Nobody, except the manufacturer of munitions, wants war—the professional soldier least of all, for he knows its horrors. An adequate defense is the best prophylactic.

These are matters which every physician should ponder seriously and deeply, and, having arrived at a sound conclusion, should broadcast it to all with whom he comes in contact, urging people to write to their representatives in the Congress, and *doing so himself*.

Only by forming intelligent opinions and expressing them to their lawmakers, can the people of this country exert any influence upon the governmental policies which are now in process of remolding our lives and those of our children.

You can save more time by thinking fast than by walking fast.—*Little Journal for Pediatrists.*

Wines and Liquors

NOW that wines and liquors are legal parts of the daily lives of many of our citizens once more, and alleged alcoholic abstinence by legislative fiat is a thing of the past, it behooves the members of the medical profession to prepare themselves to advise their patients intelligently regarding the proper use of these articles and to do their part in the campaign of education regarding true temperance, as opposed to the bigoted and intemperate propaganda for total abstinence, from which we are now free.

To that end it seems well that these matters should be frankly discussed, from all angles, in the current medical literature, and the pages of this Journal are hereby opened for such a discussion, with the sole proviso that the comments to be published must be based upon reason, sound authority or personal observation, rather than upon prejudice and emotional reactions, and must deal with the scientific aspects of the question rather than its socalled "moral" connotations.

There are two definite schools of opinion as to whether alcohol, in any form, is, under any circumstances, to be considered as a medicine. We should like to hear from adherents of both of these schools, if they will keep themselves within the limits outlined in the paragraph just preceding this.

From those who believe that alcohol *is* a medicine, in certain cases, we should like to hear their ideas as to the indications for and proper methods of employment of spirits ("hard liquors" of various kinds), wines and malt liquors (beer and ale).

From all who have sound scientific knowledge or adequate experience of the subject, we shall be glad to receive cool and reasoned opinions as to the values or drawbacks of alcoholic liquors as beverages and regular or occasional parts of the diet, with suggestions as to the conditions under which they should or should not be considered or used in this way and which are most valuable (or least undesirable) in this connection.

These are matters which should be talked over, on the platforms and in the lobbies, at our professional meetings, and in the pages of our periodicals, in order that the dry and impersonal light of scientific consultation may be shed upon them. By such consultations we can clarify our own opinions on the subject and prepare ourselves to take up a valid position and defend it against the attacks of uninformed persons or emotional fanatics of any description.

Incidentally, if there are other questions which our readers feel should be discussed in the same free and open manner, we shall be happy to have them make suggestions, which will be carried out, if deemed advisable, after the manner of the professional Consulting Room.

For one mistake made by not knowing, ten mistakes are made by not looking.—Spokane Co. Med. Soc. Bull.

Birth Control and the Doctor

PHYSICIANS and medical societies throughout the United States, no matter which side they take on such a controversial subject, are watching with interest the proposed legislation before the Seventy-third Congress, calling for amendment of the present federal birth-control laws. These amendments, commonly known as the "doctors only" Bills, are

Senate Bill 1842, sponsored by Senator D. O. Hastings, of Delaware, and House Bill No. 5978, introduced by Representative Walter Pierce, of Oregon.

This proposed legislation would amend the existing federal restrictions so as to legalize the sending or receiving of contraceptive information, instruments and medicines between physicians and their patients, medical colleges and hospitals, and from physicians' supply houses and manufacturers.

Under the present statutes, penalties of heavy fines and imprisonment may be inflicted for transporting any article intended for the prevention of conception or for receiving for distribution to others any such article that has been transported interstate or by the Government mails. For several years there has been a controversy as to the propriety of the present federal legislation, as there are many who contend that the Constitution does not grant the power to law to abridge the right of the physician to protect the life and health of his friends and patients.

The sponsors of the "doctors only" Bills merely seek to place the responsibility for prescribing contraceptive action where it rightfully belongs—in the hands of the medical fraternity.

Leading physicians also contend that this change in the statutes will greatly aid in the proper care of cardiac, tuberculous and diabetic patients, where pregnancy is contraindicated and where conception would necessitate a therapeutic abortion. They, along with other thoughtful persons, also recognize the immense economic and social importance of birth control, especially under present stressful conditions.

The far-reaching importance of these bills is daily becoming more apparent to American physicians. The passage of these laws will depend largely upon the expressions received from the physicians, and there is yet time to express such views to their Congressmen or to the Senator and Representative mentioned above, who are sponsoring these bills to amend the present laws for the interest and protection of the medical profession and the general public.

Were it a duty to worship the sun, it is pretty sure to be a crime to examine the laws of heat.—VOLTAIRE.

Carotene From Bacteria

THE bacteriologists are doing such remarkable things, these days, that the old ideas of a static bacteriology are being turned upside down by the new discoveries, so that we begin to wonder if we really know anything at all definite about these microscopic vegetables and to feel that McDonagh is right when he says that one species can change into another between two days.

One of the newest facts, presented to the meeting of the Society of American Bacteriologists last December, was that bacteria can produce carotene (the yellow coloring matter in carrots, some squashes, sweet potatoes and other yellow vegetables), which is the precursor of vitamin A in the bodies of herbivorous animals, and which we have always supposed was dependent upon chlorophyll for its elaboration. This means that, while bacteria resemble plants in their ability to synthesize carotene, they resemble animals in their lack of chlorophyll. One begins to wonder what they really are.

So far, Ingraham and Baumann of the University of Wisconsin, report that they have recovered carotene from staphylococci, flavobacteria, corynebacteria (of which the organism of diphtheria is a type) and mycobacteria. When *M. phlei* (the common timothy hay bacillus) was grown on asparagin medium containing three percent of glycerol, a yield of 0.58 mg. of carotene from each gram of dried bacteria was obtained, which is twice as much as is contained in carrots.

If things go on at this rate, something like the astounding results produced by the purple algae, in Haldane's fascinating little book, "Dedaelus," may be just around the corner. All in all, life holds vastly exciting possibilities in this year of grace.

LEADING ARTICLES

Cancer of the Colon

(A Clinic)

By Charles J. Drueck, M.D., F.A.C.S., Chicago, Ill.
Professor of Proctology, Chicago Medical School

THIS is a study of the complications of some cases of cancer of the colon.

Case 1:—W. I., male, white, married, age 48 years, came to our office six months earlier, complaining of intermittent itching about the anus. Locally there was blanching of the perianal integument, with edema of the skin and an increased amount of mucus present in the rectum. There was a lack of appetite, but he had never been a hearty eater. He was thin but was uncertain whether he had lost weight, as he had always been thin. There was occasional belching of gas and a little abdominal colic, centering about the umbilicus. Upon interrogation, he remembered that he had had several of these digestive upsets, but there seemed to be no relation of the attacks to meal time or to any particular food. There was no nausea, vomiting nor jaundice. His bowels moved every day without help and the stools appeared normal in color and consistency. There had never been any blood in the stools; no black or clay colored stools.

Examination:—A thin, ashy-colored male; pulse, 74; blood pressure, 114/68; heart and lungs, negative. *Blood:*—Hemoglobin, 50 percent; erythrocytes, 2,350,000; leucocytes, 10,050.

Abdomen flat, soft, right-sided rigidity. A mass was palpable but could not be accurately outlined because he complained of tenderness. There was no definite tenderness anywhere else on palpation of the abdomen. Urine negative; kidneys not palpable.

Roentgenologist's report showed the cecum low in the pelvis; a partially filled appendix; persistent filling defect in the ascending colon, which appeared in both the 6- and 24-hour films. The ascending colon filled with difficulty on the barium enema. Manipulation failed to fill out this defect and there was slight tenderness on pressure during the manipulation.

Diagnosis:—With these findings the differential diagnosis rested between chronic appendicitis, with adhesions; intussusception; tuberculosis of the bowel; and cancer of the bowel. All of these being surgical diseases, operation was proposed.

Discussion

Excision of the cecum, together with the immediately adjacent portion of the ileum and part or all of the ascending colon, followed by ileocolostomy, is termed ileocecal resection. The amount of the bowel removed will depend, of course, upon the kind and degree of involvement. The form of subsequent anastomosis made between the ileum and colon will depend upon the circumstances of the case and the preference of the operator.

The excision in this case included four inches of the ileum, the cecum and the ascending colon to the transverse colon, with a side-to-side (lateral isoperistaltic) anastomosis of the ileum with the middle of the transverse colon. The removal of the lymphatic vessels and glands of the region involved is of paramount importance.

Operation

A vertical incision five inches long, over the outer side of the right rectus muscle, was made, beginning above, continued over and extended below the palpable borders of the tumor. This incision was later extended upward and downward when the extent of the neoplasm was fully recognized. While the strength of the resulting abdominal wall must be considered, a free incision is always necessary. A short incision is embarrassing; it prolongs the operation and increases the technical difficulties.

When the tumor was exposed it was acutely inflamed, firm, thick and involved the entire substance of the ascending colon, beginning two inches above the cecum and extending almost to the hepatic flexure. The ileum and the transverse colon both appeared normal. No enlarged glands were palpable in the distant mesentery, but nodules were found in the mesentery close to the diseased bowel. The chief difficulty in this operation usually is the freeing and delivering of the diseased bowel.

The patient was placed in the moderate Trendelenburg position, with his right side and right buttock a little higher, to keep the loops of the small bowel away from the

operating field. The operative zone was further protected with gauze pads. The mesentery of the ileum, four inches from the cecum, was then ligated in sections and the ileum clamped and divided. The ends of the ileum were then ligated with silk ligatures and invaginated with purse string sutures of silk.

The cecum was next lifted up and drawn toward the median line, exposing the ileopsoas fascia which binds it to the posterior abdominal wall. The outer leaf of the peritoneum was incised to mobilize the bowel. As this mesenteric incision was continued upward, the entire ascending colon with the hepatic flexure was mobilized and the tumor was lifted out of the abdomen. No important blood vessels are encountered in this procedure.

As the cecum with the ascending colon was lifted up, so that its posterior extraperitoneal portion became visible, the right ureter was located as it turned downward and inward beneath the spermatic vessels and over the psoas major muscle. The ureter must always be located and protected from injury. The entire ascending colon, from ileum to transverse colon, was now hung by the inner (median) leaf of its mesentery, and this is the part containing the large blood vessels supplying the colon. Step by step, between ligatures, this median fold of mesentery was divided, all the while carefully looking for involvement of the mesenteric lymph glands.

How much mesentery must be removed with the bowel depends on the degree of involvement of the lymph glands. Enlarged glands are most likely to be found at the points of origin of the ileocolic and right colic branches of the superior mesenteric artery. A large portion of the posterior wall must sometimes be denuded of peritoneum. As the ascending colon is detached upward, the lower portion of the duodenum is encountered and must be carefully protected from injury. To the outer side of this retroperitoneal loop of duodenum lies the right kidney. The several ligatures placed upon the branches of the mesenteric artery must be very carefully placed, because any break or slip will result in severe hemorrhage. This mesenteric resection must extend down below the cecum and include four inches of the mesentery of the ileum.

The separated bowel was then clamped at the ileum and at the transverse colon, where it was desired to make the resection, and divided with a cautery; the end held in the clamp being sterilized with the cautery and thus obviating soiling of the peritoneum. The clamped end of the ileum and that of the colon were closed with a running suture, placed over the clamp and drawn tight as the clamp was released. The infolding sutures (Lembert sutures) of No. 1 catgut were placed to reinforce the purse-string sutures.

Closure of the end of the large intestine does not differ in principle from that of the small bowel, but is more difficult and, as such intestinal stumps are easily perforated, an appendix epiploica was sutured over the end of the transverse colon. The margins of peritoneum of the denuded retroperitoneal bed, and also the posterior aspect of the end of the colon were next brought together with No. 1 catgut sutures.

The free, proximal portion of the ileum was brought into such isoperistaltic relation with the middle of the transverse colon that its antimesenteric border could be laterally anastomosed with the taenia of the colon. In this position it fits snugly and adheres smoothly to the colon. It was anastomosed with two rows of sutures. The abdomen was closed without drainage. Surgeons differ regarding drainage. We use drainage only when uncertain of our asepsis or where there has been difficulty in closing the retroperitoneal space. In those cases where temporary drainage may be deemed desirable, it is best accomplished through a stab-wound in the loin.

Comments

In reviewing this subject, it is well to note that, if the lowest ileocolic vessels are cut or damaged, the first six inches of the ileum loses its chief blood supply. When the abdomen is opened, the liver should be examined, by palpation, for secondary deposits, before proceeding with the operation. The ileocecal segment of the intestine may be so largely involved and so adherent to the abdominal wall and to other coils of intestine as to forbid excision. If the ileocolic artery is ligated near enough to its origin to include the right colic artery, then practically all of the ascending colon must be excised, so as to remove such parts as are supplied by the arterial branch that is sacrificed. Although extensive, this operation was performed with very little loss of blood.

Figure 1 is a photograph of the piece of bowel removed. The pathologist's report was papilliferous adenocarcinoma, with chronic hyperplasia of regional lymph nodes.

This patient made an uneventful recovery, left the hospital in fifteen days after the operation, has gained ten pounds in weight and continues his duties of an active dentist two years after operation.

The one-stage operation of resection of the colon, with immediate anastomosis of the ileum to the transverse colon, is the ideal technic and, as a rule, does not carry a high mortality, but is indicated only in certain cases. The complicating hazards and mortality of this procedure are due to: (1) The depleted and anemic condition of the patient; (2) shock from the magnitude of the one-stage operation; (3) sepsis from soiling

Fig. 1.—Adenocarcinoma of the colon. The rubber tube passes through the ileocecal valve.

of the retroperitoneal wound or leakage at the suture line; (4) postoperative pelvic abscess; (5) gas-bacillus infection.

Ileostomy

Some writers incline to the statement that in cancer of the colon obstructive phenomena are late in appearing, but this is not my experience. Colicky abdominal cramps, accompanied with constipation or diarrhea, are usually early symptoms, and occasionally a patient is first seen in great distress from intestinal obstruction. The history in these cases can be but imperfectly obtained and a laparotomy must be exploratory until the abdominal contents can be inspected.

If there are numerous adhesions or serious obstruction, the difficulties of resection are increased. In such cases the multiple-stage operation minimizes these risks very materially, as it provides extraperitoneal resection and thus prevents peritoneal leakage and suture-line leakage. In some cases complete resection is impossible and the ileocecal region can be excluded only by short-circuiting from the rest of the intestine, and a radical operation cannot be done. It is, therefore, a good thing to have a variety of procedures.

There is great difference of opinion as to the desirability of the Mikulicz type of operation in the right colon. Some think it is the most important principle in intestinal surgery and others think its advantages are greatly exaggerated. In still other instances, the patient being moribund, only the simplest, quickest procedure, under analgesia and without intra-abdominal examination or other procedures, is often all that is permissible. In any case the indication for the ileostomy is the relief of the serious toxemia due to the absorption of the infective intestinal contents going on within the distended bowel walls, the relief of ileus or of paresis due to peritonitis.

Case 2.—In the case here reported, a white woman, aged 61, was admitted perspiring profusely, with a rectal temperature of 97°F., pulse 96 and respirations 28. She was constantly nauseated, complained of general abdominal pain and frequently vomited quantities of clear or brown material. A roentgen-ray study, made four days before, showed an obstruction in the ileocecal region.

A median incision below the umbilicus exposed a badly distended small intestine, very much congested but glistening; there were also many adhesions about the ileocecal region and an annular carcinoma in the hepatic flexure. The patient's condition forbade a radical operation, so an ileostomy was made, bringing the terminal ileum through the abdominal wound and then closing the incision in three layers, packing with gauze the wound about the exposed loop of bowel. The operation took less time to perform than it does to relate, but there are a few surgical points upon which I wish to dilate.

Enterostomy, liberally used, means establishing an external opening into any portion of the bowel, but customarily designates an opening into the small intestine, and is resorted to as a temporary means of emptying the bowel to relieve obstruction or to furnish nourishment for immediate though temporary relief, where the desperate condition of the patient or some local lesion makes radical procedures impossible.

Ileostomy is always done to drain the bowel and never as an avenue for feeding. The technical procedures may be of two types: the first being a temporary affair, wherein the fecal fistula tends to close spontaneously; the second being a definite spur-like formation, intended to remain patulous and to become an artificial anus. The ileum is usually opened as near the cecum as possible, consistent with being proximal to the obstruction, although, in desperate cases, the first coil of distended small gut found is opened. If the obstruction is temporary and is later removed, the fecal fistula should be closed as soon as possible, if nature does not do it.

A median incision was made here to allow greater opportunity for diagnosis and for relieving the obstruction. If an inguinal incision is made, be careful to avoid wounding the deep epigastric artery. Sometimes a separate stab wound incision is also made in the right inguinal region. In the midst of widespread adhesions the cecum is always our landmark. While it is desirable to use a loop of bowel closely above the obstruction, that point is not vital and, where the source of obstruction cannot be found and quickly relieved, any distended coil of intestine may be brought forward. In bringing the loop into the wound, its normal relations and directions should be maintained as far as possible and only its convex, or antimesenteric,

border lifted above the skin level. The lower the plane of the wound into which the intestine is sutured, the more readily will the resulting fecal fistula close spontaneously when the opening is no longer needed. The opposite is true where the bowel is anchored to the skin.

During this operation the particular loop of bowel was delivered outside of the abdomen and its contents milked away, after which a clamp was applied. Using the clamp to support the bowel, the antimesenteric surface was placed in its convenient position and the other loops of bowel packed off with gauze pads, to prevent soiling. Two silk sutures were placed through the musculature of the bowel below the point of intended opening and two above, to anchor the loop into the abdominal wound. These sutures passed through only the outer coats of the bowel and through the parietal peritoneum, muscle and abdominal fascia; they did not penetrate the intestinal mucosa or the skin. Thus only that part of the bowel held in the clamp is above the skin level. Suturing the bowel to the parietal peritoneum alone does not offer sufficient secure anchorage. The sutures must include the abdominal fascia. The abdominal wound was closed above and below the exposed gut, leaving only so much of the incision sutured as was fully filled by the bowel. Any excess of bowel above is returned into the wound as the incision is being closed, so that the upper bowel may not sag down on the exposed loop.

When the bowel is to be opened later (24 to 48 hours later if possible), the protruding gut is grasped with two pairs of forceps and the intervening ridge cut with a knife or scissors. Before the bowel is opened and its contents allowed to run out, the neighboring skin should be painted with a saturated solution of pure rubber dissolved in benzine. A second choice, but not so good, is to smear the skin thoroughly with zinc oxide ointment. This prevents the acrid discharges from excoriating the abdominal skin.

The next two studies are cancers of the descending colon.

Case No. 3, a white female, age 36 years, entered the hospital because of having no bowel movement for six days and during this time she was having crampy, colicky, abdominal pains, which were constantly increasing in severity. There had been vomiting every day during these six days, the vomitus being green but not fecal. She voided flatus up to the afternoon of the day she entered the hospital. There had been no previous gastro-intestinal symptoms.

Physical Examination: She was slightly anemic, with a peculiar yellowish tint to the skin, somewhat undernourished but well developed. She was in great distress with the colicky abdominal pains and the occasional vomiting, and therefore no x-ray study was attempted, although an enema would have been of value. The rectal examination was negative. Blood count: leukocytes, 16,600; erythrocytes, 4,500,000; hemoglobin, 80 percent.

The abdomen was greatly distended, as much in the lower half as in the upper, and very tympanitic throughout. A mass was found along the course of the descending colon, conforming to the shape of that viscus in its upper half. On auscultation, peristalsis could be heard over the ascending colon. The flanks were distended, the right much more than the left. No tympanitic note could be heard in the left lower flank. The abdomen was diffusely tender. The liver, spleen and kidneys were not palpable. A 1-2-3 enema was given and returned with some mucus, but no feces. A soap-suds enema, given very slowly and followed in 15 minutes with 1 cc. of Pituitrin (hypodermically), expelled a small amount of flatus, but not feces; and two hours later an enema of one pint each of milk and molasses was expelled as given. There being no relief, her stomach was washed out and she was immediately prepared for operation.

Operation

A four-inch incision along the outer border of the left rectus muscle found the entire intestine, small and large bowel both, much distended. A hard tumor filled the middle of the descending colon opposite the level of the umbilicus. It was, therefore, thought better to do a multiple-stage excision of the colon (a Mikulicz operation), which is some times spoken of as a two-step operation, because the tumor is excised in two operations, but the closing of the abdominal fistula usually requires two more steps. The distinctive feature of this technic is that the diseased bowel is delivered extra-abdominally, but not incised at the first operation. Paul modifies this procedure by excising the tumor at once. Each type of operation has its indications, but the Mikulicz operation is much safer.

The outer leaf of the mesentery of the descending colon was divided, from the sigmoid to the splenic flexure, and the tumor was lifted well outside of the wound. The mesentery was then pierced through a clear space, so as not to divide any large blood vessel and also to bring the area of immediate lymphatic drainage well outside of the wound and thus include it in the ultimate excision. A rod was passed through the opening in the mesentery and the two limbs of the exposed loop were sutured together for three inches, with No. 1 plain catgut, on both sides of the joined limbs. This delivered the diseased loop of bowel and its partly de-

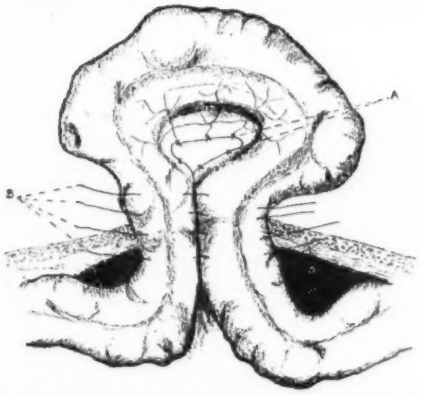

Fig. 2.—The loop of bowel has been brought out of the abdomen. (A) The mesocolic arteries have been double ligated. (B) Non-penetrating sutures have been placed for approximating the serosa of the two limbs. Corresponding sutures have been placed and tied on the opposite side.

tached mesentery well outside of the abdomen (Fig. 2). The parietal peritoneum and margins of the abdominal wound were sutured closely around the base of the two protruding intestinal limbs, but not tightly enough to strangulate them. The bowel was not opened. The entire mass was covered with rubber tissue and dressed.

Pathologist's Report:—The tissue contains only one small area of fairly normal mucosa. The entire thickness of the gut wall is invaded by atypical glandular alveoli of intestinal type. Some of these are long and branched; others are small and round. Many are lined by very tall columnar epithelium; others by several layers of more irregular epithelium. The nuclei vary greatly in size and many are in mitosis.

Multiple-Step Resection of the Colon

Case 4.—The next patient presents different complications. Mr. F. F., age 49 years, had suffered with diabetes for two and a half years, and for some time had been constipated. He had had no bowel movement for several days before entering the hospital, although he had used cathartics and enemas, the administration of which was followed by nausea and vomiting.

Upon examination no abdominal distention was found, but there was a hard mass in the lower left abdomen in the region of the sigmoid. Because of his glycosuria, several days were spent in administering insulin and colonic flushings, and a multiple-step operation was determined upon.

On February 19, 1925, a preliminary cecostomy was performed under local anesthesia. Such an opening is but temporary and its establishment in this case, as in every case, is a problem for study, because of the considerable disadvantage that the contents of the cecum, being fluid and irritating, tend to excoriate the abdominal skin in the neighborhood. It is also claimed that the loss of nutrition through such an opening may be harmful.

On March 7, the cecostomy was temporarily plugged with collodion and cotton, the abdomen surgically prepared and, through a left rectus incision, the descending colon and its tumor was freed and brought out of the abdomen, the diseased bowel resected and the divided ends approximated. Both ends of the colon were implanted, double-barrel style, in the lower end of the abdominal wound. This portion of the incision is more mobile and lends itself more readily to closure at the second stage (Fig. 3). The

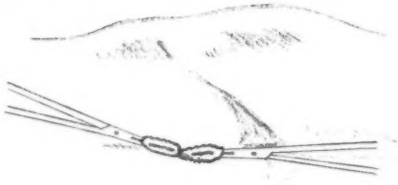

Fig. 3.—First step of Mikulicz type of resection of the colon. Clamps are left attached for two days.

bowel ends, with clamps attached, were sutured into the wound and the wound closed about the cut ends of the bowel. The abdominal wound was protected against contamination by the clamps, which were left attached for two days, by which time the wound had healed sufficiently to resist infection.

The second step consisted in dividing the walls between the stump ends of the colon. If the approximation has made a double-barreled spur and it is cut deeply by a long-jawed clamp, then the fecal stream readily flows along the bowel and the closure of the colostomy is readily affected without a fecal fistula resulting. Ten days after the colostomy has been established, the partition-severing clamp is applied and locked, with one jaw in each opening of the colon. The clamp will cut itself free by pressure necrosis in five or six days. In setting the clamp it is a good plan to lock it at the first notch only on the first day, and tighten it later. After the clamp has sloughed out, the patient is sent home for six or eight weeks before attempting to close the fecal fistula. This period of waiting is annoying to the patient, because of the fecal discharge and the skin irritation, but it is necessary to wait until the edema disappears from the wound and the peritoneum becomes firmly fixed about the stumps of the colon, so that it will not tear or become detached during the manipulations of the closure operation.

On June 18, feeling assured these changes had taken place, the wound was reopened un-

der local anesthesia; the skin was separated from the edge of the bowel, a small strip of skin being left attached to the bowel to prevent oozing during the dissection. The fascia and muscle were separated from the projecting loop of colon, which stood up with the adherent peritoneum walling off the peritoneal cavity. The edge of the spur of intestine (the median partition having been cut through) was freshened by cutting away the end of the colostomy with its adherent skin. A few bleeders were ligated and the bowel ends closed with through-and-through sutures (Connell). A second layer of inversion stitches (Lembert) were placed to reinforce the first line.

There is, of necessity, considerable soiling in this procedure and, in this case, a rubber dam drain was provided down to the bowel at the upper angle of the wound and down to the fascia at the lower angle of the wound. The major portion of the wound healed nicely, but a fecal fistula persisted. The cecostomy fistula also continued to drain. Each sinus drained about a dram of material daily and the patient left the hospital with these sinuses still discharging, but the tract soon closed spontaneously.

The *pathologist's report*, always illuminating, is as follows: "Carcinoma of the colon. Serosal surface is rough and discolored and firm nodular areas are seen. On section, the largest portion appears to be occupied by a firm tumor; a portion of the mucosa is ulcerated. On either side there is intact mucosa. Beneath the ulcerated mucosa, white, firm tissue extends through serosa and between fat. In the fat area it has a glistening, translucent appearance. This tumor extends beneath muscle under intact mucosa on either side.

"Microscopic: In the fungoid, ulcerated area the mucosa is absent and is replaced by tumor tissue composed of closely-placed, atypical glands of the large intestine type. The tumor penetrates the submucous and muscular coats, forming large areas of branching, atypical glands, lined by one or several layers of epithelium varying from cuboidal to columnar. Mitoses are numerous."

Thus we see that each patient presents his own set of complications and our course of treatment must be adjusted to the individual.

1132 E. 49th St.

What Everyone Should Know About Cancer*

By Joseph Colt Bloodgood, M.D., F.A.C.S., Baltimore, Md.

THE mortality of cancer is appalling. In adults after the age of forty, cancer is one of the most frequent causes of death. Now that tuberculosis has, to a certain extent, been controlled, some statisticians claim that cancer is the more frequent cause of death in people over forty. We can safely say that, if the public is educated in regard to the facts about cancer, its annual mortality will be reduced at least one-half, perhaps two-thirds.

Fear the *beginning* and not the end of cancer. In all forms of cancer, fear of the disease comes too late. Fear at the first suspicious sign will be of great value. This fear will induce patients to seek advice and treatment in that early stage, in which the chances of a cure are best, even up to one hundred percent.

Pain is a late symptom in external cancer. In cancer of the skin, lip, tongue, and regions beneath the skin, such as in the breast, thyroid gland and muscles, pain usually comes late, so if one waits for pain, one often waits too long.

*This is the original article of Dr. Bloodgood's first public address delivered in Hagerstown 1913, published in the Baltimore *Evening Sun* a few months later, written, therefore, twenty years ago, but still sound and true.

The first warnings of cancer do not differ from the warnings of diseases that are not cancer. This is an unfortunate state of affairs. Everyone, therefore, must be educated about these warnings, for this is the time to seek the advice of the medical profession. This is the most opportune time for the examination which will lead to the diagnosis. This is the most opportune time for treatment which will promise the best results with the least danger.

Never in Healthy Spot

Cancer never begins in a healthy spot. In external cancer the warning is always something, first, to be seen with the eye or felt with the finger. These first signs are warts, moles, little areas covered with a scab, or an unhealed wound, or there may be a little lump or nodule beneath the skin or deeper. Pain is rarely present.

Unfortunately many people have frequently observed all of these things, which have either disappeared or remained unchanged for years. They remember these cases, but do not realize the great number of unfortunates in whom cancer has developed from such apparent skin defects or nodules beneath the skin.

It may be truthfully stated that external cancer is a disease which develops under ignorance, skepticism or procrastination, because of entirely needless fear of an operation.

It is not for the patient, but for the physician, to decide whether these visible and palpable abnormalities are to be left alone or removed. In this stage, the removal of the defect always accomplishes a cure, and sometimes it can be healed without removal.

Cancer of the Uterus: There is every reason to believe that cancer of the uterus could be placed among preventable diseases. There is always a discharge of a different character, at a different time and for a longer period than normal. Most women have heard of cases, in which such things have been observed and no dangerous disease has developed, and they are not impressed with the few in which such symptoms were the warnings of a cancer which developed later. Every woman should be educated never to conceal such symptoms, but immediately to seek the physician's advice.

Cancer of the Breast: In a woman over twenty-five, the finding of a lump in the breast should be considered a definite warning. If this lump is subject to treatment at once, the chances are fifty percent that it is not cancer. In such a fortunate event it is only necessary to remove the lump. When the surgeon at his operation finds that the lump is cancer, the chances are one out of four that it is the least malignant form of cancer, in which the probabilities of a cure are one hundred percent. If the lump proves to be a more malignant form of cancer the probabilities of a cure are, at the worst, eighty-five percent. There is sufficient evidence to indicate that this can be greatly improved.

When the woman delays, the chances of a lump becoming malignant increases with each week's delay. The same operation for cancer in the late stage reduced the probability of a cure in the least malignant form of cancer from one hundred to sixty-four percent, and in the more malignant types from eighty-five to thirty-three percent.

Unfortunately, women remember those lumps which have been present a long time and in which cancer has not developed. They also may know of lumps which have disappeared. What they should know and remember is that delay to seek advice and treatment is gambling with death.

Cancer of the Lip and Tongue: Every man is warned in time; there is always first to be seen and felt, on the lower lip or on the tongue, some abnormal defect. This defect is often a burn from smoking or an irritation from ragged teeth. When men heed this warning and receive treatment within a few weeks, the probabilities of a cure are one hundred percent.

Irritation and Cancer: Any irritation of the little skin defects, or injury to a nodule beneath the skin increases the probability of the development of cancer or, if cancer is already present, of its more rapid growth. No one should treat such apparently innocent lesions himself, but immediately consult a physician.

Cancer of Bone: The early warnings here are obscure. If anyone receives an injury to bone and the swelling and discomfort do not disappear in a few weeks, the physician's advice should be sought and an x-ray examination made. The experience of pain or discomfort in the region of any bone should be looked upon as a warning for an immediate examination and an x-ray study.

Cancer of the Stomach and Colon: The problem of early recognition of internal cancer is a very difficult one, because there are no very definite signs. One, however, is always warned by a feeling of discomfort and some sensation never before experienced, and this is usually associated with what is called "indigestion." But such symptoms are so frequent, in so many individuals in whom no serious disease develops, that the majority do not know that these sensations may be the first warning of internal cancer.

The finding of blood in the stools or in the urine should be looked upon as a definite warning.

The recognition of the earliest stage of conditions that may lead to cancer, or of cancer itself, indicates a treatment which, in the majority of cases, accomplishes a permanent cure.

In cancer of the skin, lip and tongue, the operation, in this earliest stage should accomplish a cure in one hundred percent of cases. The operation is a simple one; it can usually be performed under local anesthesia. There is no danger nor mutilation.

The operation for cancer of the breast is neither serious nor dangerous, nor is the operation for cancer of the uterus. Few people realize that operations for cancer of the stomach, colon, and kidney are by no means dangerous. The failure to cure is due to delay, not surgery.

People, however, cannot be treated unless they seek advice and, as a rule, they do not seek advice in this earliest stage unless they are educated to do so. Therefore, the price of protection is the education of the public and the better education of the physician.

The education of the people seems a difficult problem. They cannot be taught a great deal at once. Too much fear must not be excited, or the timid will turn their heads away as the ostrich places his head in the sand to protect himself from impending danger.

It seems unnecessary to present the gruesome, hopeless, agonizing side of cancer, but the people must be taught about the simple, apparently innocent beginnings which may be cancer. The people must be told that treatment in this earliest stage is devoid of danger, gives little or no discomfort, and that even those operations which they may consider expensive involve a minimum risk and disability.

The message is so simple that most people will be disappointed when they learn how cancer is to be controlled. No miracle is needed, unless the education of millions at a time may be considered miraculous. If one is to have an operation, one may as well submit to it when it is least dangerous and offers the greatest probability of a cure.

Bernard Shaw, in "Doctor's Dilemma," claims that most doctors practice medicine as patients wish them to, or, in other words, do that which the patients themselves think is best, rather than what the physician knows is best for the patient.

There is no doubt that, until recently, the majority of people, when ill, wished immediate relief and strenuously objected to any annual preliminary examination. The briefer the examinations the better the impression the physician made. Those who wish protection from cancer, or from any serious disease, must submit to a thorough examination before treatment.

Diagnosis Not Easy

The easier the diagnosis, the worse the prognosis. The "snap" diagnosis or a diagnosis made on a superficial examination, if correct, simply means that the disease is in such a late and hopeless stage that its nature is written in capital letters on the surface of the body. For it is in the beginning of most diseases that the diagnosis is most difficult and can be made only after a most painstaking examination, often only with the help of instruments of precision and laboratory investigations.

It is more difficult to prove absolutely that there is nothing the matter with an individual, or to recognize the disease in its earliest stages, than to make a diagnosis in the later and usually more unfavorable or hopeless stage of the disease.

Medicine which relieves pain may be harmful. Remember that medicine which relieves pain does not, as a rule, have any effect upon the disease itself; it simply produces a period of freedom from discomfort, and by so doing delays the best time for treatment. This is the secret of most quack medicines and so-called "sure cure" medicines. This is also the secret of most drugs obtained from a physician without a thorough examination.

There is always an interval between the first warning and the development of cancer. There is always an interval between the development of cancer and its spread from that spot. In a few instances the interval may be only a few weeks; in others, months; in many, years. No one can tell this interval. Delay, therefore, is gambling with death. Remember, no harm can be done by the earliest recognition and treatment. The result is never influenced by such dispatch, except for the better.

The cure of cancer, therefore, at the present time, is not a drug, nor a serum, nor a ray, nor a miracle, but simply the education of the people as to the signs of its beginning in local lesions and the importance of an immediate examination, which will lead to recognition and treatment in the most favorable stages for a cure.

If a few can be educated, why not millions? The investigation in the Surgical Pathological Laboratory of the Johns Hopkins Hospital and University has demonstrated that the local propaganda of education has had tremendous influence for good. When the people begin to realize that the majority of the 75,000 and more who die annually of cancer are the adult, vigorous, healthy bread earners and family rearers of this land, they too will begin to appreciate the economic value of this propaganda of education.

The mother is most apt to get cancer of the uterus, and she should be educated as to the proper examination and treatment. It is usually the healthy woman who gets cancer of the breast. It is the vigorous man over forty who gets cancer of the lip, tongue and stomach. Most people in whom cancer begins are absolutely healthy. The majority of those who die from it have been valuable to their families and to the community.

The economic value of the control of cancer may be greater than of the control of tuberculosis, as the individual protected or cured from cancer is never handicapped. Cancer is never brought about by previous debilitating diseases. We are, therefore, protecting the strongest and most essential members of the race.

Philanthropists have given much for the laboratory investigations on the etiology of cancer and the study of cancer in animals. They should see how much more good their gifts would do if given to this propaganda. The American Society for the Control of Cancer, which has behind it all the best medical and surgical associations of the United States and Canada, is educating the public, through the press, on the prevalence, nature and control of cancer.

3301 N. Charles St.

The Early Diagnosis of Cancer of the Female Genitalia

By Leon J. Tiber, M.D., Ph.D., Los Angeles, Calif.

CANCER of the female genitalia presents an important problem to the medical profession. There seems to be an attitude of indifference to this serious affliction. This indifference is due to various misconceptions: First, that cancer of the female genitalia is rare, or that, when present, it is hard to diagnose in its early stages; and second, that, when diagnosed, the prognosis is almost hopeless. If we realize that these premises are grossly incorrect, much unnecessary suffering and death can be prevented.

One of the reasons for the existing pessimism regarding cancer of the female genitalia is the reluctance on the part of the patient to seek advice for supposedly unimportant symptoms. Thus it has been reported that, in a large series of cases of carcinoma of the cervix, at the time the patients presented themselves for examination, 71 percent were far advanced and 28 percent showed limitations to the cervix, leaving a small margin of from 1 to 2 percent in whom early cancer of the cervix was found curable. Other reports show that 95 percent of all patients presenting themselves with cancer of the cervix are beyond the stage of early diagnosis and offer a very poor prognosis, even for a three- to five-year cure.

Clark and Ferguson report that, in patients who came under observation six months after the first symptom manifested itself, the prognosis varied thus: 60 percent were inoperable; 1 in 7 had a chance for a five-year cure. After six months, only 1 in 26 had a chance for a five-year cure. While in cancer of the body the chances for cure are greatly improved, in cancer of the external female genitalia the prognosis is even worse. With such appalling facts it is apparent that we must seek some way of combating this dreadful malady.

Carcinoma of the female genitalia causes more than one-fourth of all the deaths from cancer. Carcinoma of the cervix exacts a toll of 10,000 deaths every year. It is the most common form of cancer in the female, except carcinoma of the stomach. Next in frequency is carcinoma of the body of the uterus. Out of 31,000 cases of carcinoma, the uterus was affected primarily in more than one-third of the cases. Of 12,000 patients admitted to a European gynecologic clinic, 4 percent had cancer of the uterine cervix, and 3 percent of those with cervical cancers had never been pregnant.

Carcinoma of the body of the uterus is much rarer than carcinoma of the cervix, and more insidious, for 42 percent of body cancers are in multiparas. Carcinoma of the ovaries is not very rare. It occurs as a secondary manifestation of otherwise non-malignant cysts and cystadenomas, of ovarian and parovarian origin, and as a remote metastatic implantation from carcinoma of other organs. Carcinoma of the vulva is rare and almost entirely limited to women beyond the menopause. It is usually grafted on some chronic inflammatory lesion, especially leukoplakia or the dermal changes of an old pruritis, as well as in kraurosis. It occurs in virgins, nulliparas, and multiparas. It may be primary on any part of the vulva and is most common on the labia majora, the clitoris coming next.

Primary vaginal cancer is rather rare and usually starts on the posterior wall. The initial stage may be single or multiple warts, an elastic nodule or a flat infiltration. A fungating mass, readily breaking down and bleeding, is characteristic. Another form is a granular, ulcerated area, with infiltrated margins. Still rarer is a carcinomatous infiltration, rigid and contracted.

There are numerous difficulties which prevent the early diagnosis of cancer of the female genitalia. The first is the insidious character of the disease. The patient may have quite an extensive lesion without much warning. She usually has symptoms, but they are similar to changes occurring every month of her menstrual life-cycle. After the menopause most women, because of the absence of manifested activity of their sexual organs, think that those organs are protected from diseases. Again, leukorrhea, which is very common among women, is considered a natural thing, provided it does not reach a stage of extreme annoyance.

Other reasons for not seeing a doctor are: ignorance, prejudice and poverty or fear. Many times the cancer patient has been treated by quacks or others, who know of someone who was cured by some well advertised nostrum. Again, some people fear to know the truth and evade seeing the physician.

On the other hand, physicians have not taken the symptoms of carcinoma of the female genitalia seriously enough. The general practitioner has not the time to inquire thoroughly into the history of the patient's complaint. Some have a timidity or lack of inclination to do a detailed bimanual examination, especially in regard to a speculum examination or other special tests. Many are

still in the habit of prescribing douches for all abnormal conditions of the female genitalia. When the patient comes to a regular practitioner while her lesion is in an early stage, the chances are that it will not be easily recognized, and dangerously dilatory treatment will be instituted until it is too late for cure. There really is not much use in urging the laity to consult its physicians periodically, unless physicians pay closer attention to the symptoms and learn to diagnose cancer in its incipiency.

Etiology

There are many theories as to the cause of cancer. Of all claimed causes, one seems to have the best claim to supremacy. Clinical experience has shown that, regardless of the underlying cause, certain factors, namely irritation and infection, have an etiologic bearing. In speaking of the etiology of cervical carcinoma, Howard A. Kelly states, "From over forty years of clinical observation, I am convinced that the trauma of pregnancy, followed by an infection of the cervix, with thickened lips, eversion of the mucosa and a constant mucoid or muco-purulent discharge, will account for a large number of these cases. For this reason I make a point, in every instance, either of wiping out the diseased mucosa thoroughly with the actual cautery, or, if any radical operation is indicated, as in fibroid tumors or pelvic infections, of removing the entire cervix with the uterus, where the cervix appears unhealthy."

Cancer of the cervix is preceded by pregnancy in 97 percent of the cases; especially when the cervix has been lacerated and the lacerations have been neglected, or have become eroded or subject to constant irritation. The ages of these cases range from twenty years up to senility. It is as frequent in whites as in negroes. It is not more prevalent among the poor than the well-to-do. However, the highest percentage of operable cases occur among the better class of patients.

Symptoms and Signs

In carcinoma of the uterus, the first symptoms to attract the attention of the patient or the physician may be a discharge of blood from an internal ulcerated surface. But conditions other than cancer may give rise to similar symptoms, so the symptoms of early cancer are not distinctive and should only serve to arouse suspicion of the presence of that disease. In this situation, the more certain the diagnosis, the less the probability of cure.

If cancer of the female genitalia is to be detected in its early stages, a thorough knowledge of pre-cancerous lesions, as well as its earliest symptoms, must be possessed by the physician. One must learn to look with suspicion on such lesions as keratoses, fissures, moles, chronic ulcerations and indurations, and the benign tumors which so often precede the development of cancer itself. Erosions and lacerations of the cervix of the uterus are the most common factors which predispose to cancer of the cervix. Kraurosis and leukoplakia of the vulva are forms of superficial lesions, benign in origin, which exhibit a definite tendency to malignant change. Cystic tumors of the ovaries, and polyps of the uterus which are benign in character, are capable of malignant transformation.

The early diagnosis of cancer of the uterus demands a prompt digital and visual examination. The appearance of a discharge should be regarded as a suspicious sign, especially if the discharge is bloody and not related to catamenia, or appears after the menopause. If the discharge appears irregularly, after exertion, straining at stool, the use of a douche or after intercourse, it is suspicious of carcinoma of the cervix. Any change in the character of the discharge, even though not bloody, especially if it becomes more profuse, more foul, more watery or more irritating, should arouse a suspicion of malignant disease of the uterus.

On examination one may find an indurated excoriation or ulceration of the cervix, which may be within the os. Later there may be deep infiltration or a productive cauliflower growth, with ulceration, bleeding and offensive discharge. In carcinoma within the cervical canal, a uterine sound or a cotton-wound applicator should be introduced within the cervical canal, up to the margin of the internal os, and if one feels a roughened, perhaps a slightly depressed surface, which bleeds easily, it is very good evidence of carcinoma. In these cases we must rely on microscopic examination of tissue removed with a small curet.

In cancer of the body of the uterus one usually finds an enlargement of the uterus, with a history of a watery discharge and hemorrhage. Diagnosis in body carcinoma is ordinarily determined by curettage and examination of tissue.

In carcinoma of the tube or ovary there usually is abdominal swelling and a feeling of weight or pressure. On examination one finds nodular masses bilaterally, especially when a Krukenberg tumor is present. The Krukenberg tumor is metastatic in origin, from a breast or an abdominal viscus. Carcinoma of the ovary is present in the comparatively young and after the climacteric and may vary in size from small growths to a mass as big as a man's head. Carcinoma of the tubes is present after the climacteric only, and is usually small in size. The development is very rapid and metastases are numerous. In a woman past the menopause, a free, watery discharge from the vagina, not due to infec-

tion or irritation, with a tumor-mass lateral to the uterus, should give rise to the suspicion of a papilloma or papillary carcinoma of ovaries or fallopian tubes.

Primary vaginal cancer is rather rare and it usually starts on the posterior wall. The initial stage may be single or multiple warts, an elastic nodule, a flat infiltration or a fungating mass, readily breaking down and bleeding. Another form may be a granular ulcerated area with infiltrated margins. Still rarer is a carcinomatous infiltration, rigid and contracted. The symptoms usually found are a foul discharge, hemorrhages, dull, aching pain and difficulty in defecation and micturition.

Carcinoma of the vulvo-vaginal gland is rare. It occurs usually in women past the menopause. It may appear in the form of a swelling, often painless; or it may be firm, show a tendency to fixation and break down early. Primary carcinoma of the labia minora is very rare. It may appear as a nodule or hard and painful induration, with early breaking down. Primary carcinoma of the clitoris and hymen is very rare, but when present it offers little difficulty in diagnosis. When in doubt, do a biopsy.

Summary

In conclusion, to make an early diagnosis of carcinoma, we must emphasize certain things in our daily work:

1.—A complete history, especially in regard to an irregular vaginal discharge which is watery, spotting or bleeding, regardless of the age of the patient.

2.—A bimanual examination in all female patients except virgins, as well as a speculum examination. In doubtful cases, make a combined recto-vaginal examination—it may reveal surprising things.

3.—Determine the cause of the discharge. In a very large percentage of cases, the discharge is due to inflammation or infection of the cervix. In certain cases it is due to infection with *Trichomonas vaginalis.*

4.—Determine whether the cervix is lacerated. Does it bleed on manipulation? Has it any hard nodules? Is it papular or is it soft and mushroom-like? Investigate the entire cervix and not merely the vaginal portion.

5.—Inquire about any post-coital or post-douchal bleeding.

6.—If the cervix is diseased, try to pierce it by means of a sterile probe. In carcinomatous condition the probe penetrates very readily and is followed by a marked bleeding, while otherwise definite resistance is offered to the probe.

7.—In suspicious cases, by all means do a biopsy, for that is the only way a positive diagnosis can be made. It is an office procedure. The fear of spreading the cancer by the use of the knife may be allayed by cauterizing the base of the cut surface, thereby sealing the lymphatics.

8.—In cases of bleeding from the body of the uterus, a diagnostic curettage must be done, in a hospital, and the tissues examined by a capable pathologist.

9.—Follow up the non-malignant case with periodic examinations. Remember that 95 percent of all cancers of the cervix that are demonstrable at first examination in the office, offer an unfavorable prognosis for cure.

10.—Impress the patient with the possibility of early diagnosis of carcinoma of the female genitalia, and insist upon triannual examinations, as a prophylaxis against this dreadful disease.

11.—Treat all suspicious and unexplainable symptoms, signs and findings of the female genitalia as due to malignant disease until proved otherwise.

3875 Wilshire Blvd.

TAXES AND SLAVERY

Is it any wonder your taxes have gone up, and up and up? How could it be otherwise? If men selected to represent the people in the Congress—and this is likewise true of state legislatures—permit tears to roll down their cheeks because of some word-painting presented by an emotional artist, and close their eyes to certain fundamental truths, where is the whole thing to end? You know, if you will but take the time to do a bit of reasoning for yourself. It will end in all you have managed to acquire being wiped out, and you, yourself, crushed by the blow, desperate because of your condition, among those crying for governmental aid. And when all property is wiped out, when there is nothing left to tax, then what? Just exactly what those advancing the theory of paternalism through governmental benefactions seek—all productive property will be owned by the government. Instead of being an independent citizen you will be the servant or slave of this government.—COMMITTEE ON AMERICAN EDUCATION.

The Umbilical Cord Hormone In Cancer*

By Toshio Ishihara, M.D., Takamatsu, Japan

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THE use of the umbilical cord in medicine is recorded in old Chinese literature of the sixteenth century; and in Japan, Kobo-Daishi, the famous Buddhist priest of the ninth century, is said to have used this material, combined with medicinal herbs, in the treatment of cancer. This custom still remains, in some parts of the country.

My studies of the anatomy and physiology of the umbilical cord, extending over five years, have convinced me that Wharton's jelly is an important structure, having an endocrine function, and that a similar hormone is to be found in the jelly between the inner and outer egg-integuments of the placenta and in the corpus luteum of the ovary. I have, therefore, called it the "P.O.U." (placenta-ovary-umbilicus) hormone. This is a yellowish-brown substance, having the odor of an amino acid, hygroscopic and freely soluble in water, but not in alcohol, ether or acetone.

A hormone of similar properties has been found in the albumin of the eggs of fish, birds and reptiles, in unhulled rice and in beans of all kinds; but not in yeast.

Repeated experiments have shown that this P.O.U. hormone, given by injection or by mouth, has the power to check the growth of malignant tumors, to reduce them in size, and, in many cases, to eliminate them entirely. It is worthy of serious study by specialists in cancer of all regions. Being a gynecologist, I shall, however, limit my discussion to cancer of the uterus.

The fact that there is no glandular structure in the umbilicus does not rule it out as an endocrine organ, for it is now generally recognized that the heart (a muscular organ) produces a specific hormone, in the broader sense of that term. Moreover, malignant tumors of the umbilical cord have never been reported.

The P.O.U. hormone, produced by the ovary, probably decomposes the decidual membrane formed monthly in the uterus and results in menstruation, unless pregnancy occurs, in which case it removes them more gradually. It also has the property of destroying the incomplete products of the decomposition of albuminous substances in the body. A dose of 0.02 Gm., of this hormone, by mouth, will completely remove those albuminous substances (amino acids) giving the ninbydrin test, which are frequently found in the urines of healthy persons.

*This is an abbreviated version of Dr. Ishihara's paper, embodying its clinical aspects only. It is hoped that the entire paper may be published soon.—Ed.

Laboratory tests have demonstrated that this hormone has the power to dissolve decidual tissues, the uterine myoma tissue and, especially, cancer tissue from the uterus. A. W. Hochloff reported (*Monatschrift f. Geburtshülfe u. Gynäkol.*, Band 91, Heft 5-6; 1932) that his histochemical study of Wharton's jelly revealed the existence of a ferment or catalase having particular interest from the biologic viewpoint.

P.O.U. Hormone and Cancer

Since Cohnheim advanced his germnule theory, cancer has become generally recognized as having a close relationship to embryonic tissue. In *Am. Journ. Obst. & Gynec.*, Vol. XII, No. 1, 1926, E. Davis states that the most outstanding feature of cancer cells is that they are undifferentiated and resemble embryonic tissue. This explains why P.O.U. hormone destroys cancer cells, in the same manner that it destroys decidua cells. The serum changes of pregnancy, which make the Aschheim-Zondek test appear, are also found in the presence of cancer.

There are no reliable reports of spontaneous cures of human cancer; therefore, if even one instance of a cure by medical means, without the use of surgery, x-rays or radium, can be proved beyond question, the method used may be considered to have, at least, established its potential value.

I have used P.O.U. hormone in more than 200 cases of cancer, and many of them appear to be cured. Several have had no return of the tumors after the lapse of more than three years. But, even if the disease returns, it can be treated again successfully by the same method—which is not usually the case after surgical treatment.

Given by injection or by mouth, P.O.U. hormone produces several general systemic changes, as follows:

1.—An irregular *rise in temperature* in most patients, but not in all. (No such fever occurs when it is given to healthy persons).

2.—*Albuminuria* is not uncommon in cancer patients; but where it is absent, it frequently appears after the administration of P.O.U. hormone, and disappears again as healing progresses.

3.—*Nausea, vomiting* and paresthesias of taste. (These are not uncommon in cancer patients.)

4.—A feeling of *swelling* and *pressure in the nipples.*

5.—More or less severe general *pruritus* is not uncommon.

Local changes are also seen in most cases:

Fig. 1.—Preparation made after two years of treatment. The Islands of Cancer Cells are Surrounded and Isolated by Increased Connective Tissue.

1.—A purplish-blue color of the portio vaginalis of the cervix.

2.—Softening of the uterus, similar to that occurring in pregnancy.

3.—Reduction and disappearance of the cancer tumor, at a speed proportional to the extent of the lesion and the doses of the hormone used. If the progress is slow, small masses of malignant cells may be surrounded by connective tissue, forming "islands." (See Figs. 1 and 2.) These eventually disappear, the cell-inclusions gradually losing their malignant characteristics and being attacked by leukocytes.

There are changes in the blood, as well:

1.—Increase in the sedimentation rate of the erythrocytes, followed, as the condition improves, by a progressive decrease and return to normal. In extreme cases the rate may increase from 40 to 120 millimeters per hour, before it falls again. Sometimes the sedimentation rate, which is usually rapid in cancer, becomes normal without the preliminary increase.

2.—Reduction of the leukocytosis which is common in the later stages of cancer.

3.—A marked relative increase in the lymphocytes (from 20 percent to 28 percent, average), which is a favorable sign in cancer.

Large cancers heal in two ways, under this treatment: Either by a gradual increase of connective tissue and round-cell invasion, as previously described and illustrated; or by a large part of the malignant mass becoming necrotic and sloughing, sometimes with rather alarming hemorrhage.

Large cancers require large doses of the P.O.U. hormone, and these cause rapid disintegration of the malignant tissues, with the rapid production of toxic products and prostration of the patient. It is, therefore, necessary, when treating large cancers in this way, to adjust the doses of the hormone to the requirements of the case with the utmost care.

Sometimes the use of P.O.U. hormone, as an adjuvant to more radical forms of treatment (surgery or radiation), brings about highly gratifying results, by their mutual action.

Case Reports

In order to make a clearer picture of the results which follow the use of P.O.U. hormone in cases of human cancer, I will describe a few typical cases in some detail.

Case 1: S. K.; age 67; occupation, agriculture; date of first consultation, June 5, 1930; diagnosis, cancer of the uterus with moderate infiltration of the pelvic and uterine wall: squamous-cell cancer.

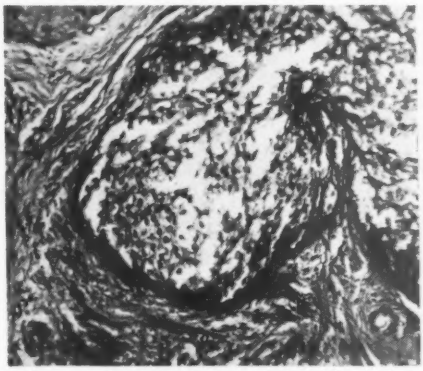

Fig. 2.—Enlargement of one Island in Fig. 1, showing Retrogressing Cancer Cells.

History: This woman had always been healthy and there was no evidence of hereditary taint. She had never given birth to a child. Bleeding and leukorrhea had been present since early April, 1930.

General Condition: The patient was well nourished; no anemia nor loss of flesh; pulse, temperature and breasts, normal; no tumor in the abdomen or lymphatic glands; urine normal.

Local Condition: The deeper part of the vaginal wall was somewhat hard and the surface rough. The uterus was rather small and retrovered. Rectovaginal palpation revealed slight infiltration in the left pelvic tissues. The portio vaginalis of the cervix was small, irregular and partially destroyed and the external os was not recognizable. The surface of the cancer was rough and papillary, and bled at the slightest touch.

Treatment: On account of the patient's advanced age, and the fact that the malignant infiltration was of medium degree, I would not attempt surgical or irradiation treatment, but used the P.O.U. hormone alone, the daily dose being from 25 to 30 milligrams of the powdered hormone by mouth, with an occasional injection. Healing required 135 days—from June 5 to October 19, 1930.

During June, the hormone was given by mouth on the 5, 6, 7, 8, 9, 11, 13, 15, 17, 18, 19, 20, 24, 25, 26, and 27.

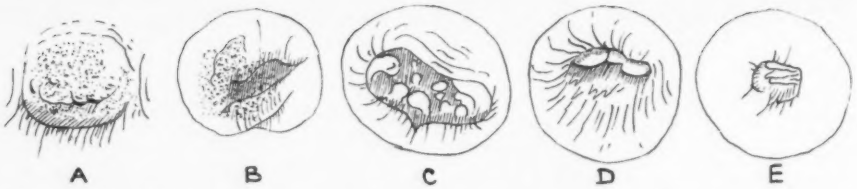

Fig. 3.—Clinical Changes in a Case of Cancer of the Cervix, not here Reported: (A) Oct. 19, 1931; (B) Dec 19, 1931; (C) Dec. 22, 1932; (D) Jan. 16, 1933; (E) Sept. 14, 1933.

In July, on the 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 18, 19, 20, 21, 26, 27, and 29, with injections on July 2 and 28.

In August, on the 2, 3, 4, 5, 9, 10, 11, 12, 18, 19, 20, 21, 27, and 29, with injections on August 26 and 28.

In September on the 5, 6, 7, 12, 13, 14, 15, 16, 27, 28, 29, and 30, with injections on September 4, 12, and 27.

In October on the 4, 5, 7, 8, 10, 11, 14, 15, 18, and 19, with injections on October 4 and 14.

Progress: June 5, 1930: The sedimentation rate of the erythrocytes before treatment was 88 millimeters per hour.

June 10: The bleeding stopped.

June 18: The ulceration of the anterior vaginal wall had disappeared and the tumor had decreased in size, with smoothing of the surface.

August 4: The tumor was very much reduced in size and contraction of connective tissue was noted here and there. The posterior part of the vaginal wall had become flat.

September 3: The portio vaginalis had shrunk greatly and had changed its shape, with wrinkles appearing here and there. One part of the surface was still rough and bled slightly for the first time since the bleeding stopped on June 10.

September 11: The tumor had almost disappeared and the shape of the posterior wall and the portio vaginalis was approaching the normal, except for one ulcer about 8 millimeters in diameter.

September 23: The erythrocyte sedimentation rate was 20 millimeters per hour, the appearance of the cervix was practically normal and the infiltration of the pelvic connective tissue had disappeared. She was discharged and has reported every year since that time that she is enjoying good health.

Case 2: Y. K.; age 38 years; 7 para; occupation, agriculture; first consultation, March 31, 1930; diagnosis, cancer of the uterus with high infiltration of the pelvic connective tissue on both sides.

History: Since July 6, 1929, she had received radium treatment at a certain university hospital for 60 days, but recovery was not obtained. Later she became worse, with increased leukorrhea and pain in the back.

General and Local Condition: The patient was a slightly enemic, medium-sized woman. Her uterus was rather large but in normal position. The left pelvic connective tissue was heavily infiltrated; slightly on the right. The portio vaginalis was covered with necrotic tissue and the external os could not be recognized. The anterior and posterior vaginal walls showed cancer infiltration. The erythrocyte sedimentation rate was 50 millimeters per hour; hemoglobin, 65 percent (Sahli); erythocytes, 3,990,000; leukocytes, 11,400. The ova of ascaris lumbricoides (round-worm) were found in the feces and a moderate amount of albumin in the urine.

Treatment: When she came under my care in the hospital, I gave her 25 milligrams of P.O.U. hormone regularly every day.

Progress: Her temperature, which had been normal up to the time I saw her, went up to 100.8°F. On the second day of her treatment and for six weeks thereafter, her daily temperature averaged about 100.2°F., except for one day toward the end of that period, when it went up to 104°. After that it returned to normal gradually.

On the fifth day of treatment the erythrocyte sedimentation rate increased to 70 millimeters per hour, but came down by degrees.

Locally the secretion had entirely ceased in two weeks, and in fifty-two days the cancerous tissues of the portio vaginalis and uterine wall had entirely disappeared and been replaced by soft and normal-appearing mucous membrane. The infiltration of the pelvic connective tissue had disappeared and she had no further distress of any kind, and was discharged. She is still in good health after three years and eight months.

Case 3: K. W.; age 30 years; 3 para; no occupation; first consultation, January 2, 1931; diagnosis, prickle-cell cancer of the portio vaginalis.

History: Headache and uterine bleeding began in August, 1930. A histologic examination at a certain university hospital pronounced her trouble to be cancer of the uterus.

General and Local Condition: Though rather small, the patient appeared rugged and in good health.

The uterus was found in normal position and movable; no infiltration in the pelvic connective tissue; ulcerations, about 2.5 by 4 centimeters, were present on the anterior and posterior surfaces of the portio vaginalis, and a mere touch on these spots would cause bleeding.

Treatment: No operation or any treatment other than P.O.U. hormone was used.

On the first day the hormone was given by injection and also 30 milligrams by mouth, and the oral dose alone was repeated on the second day; then two days without treat-

ment and a repetition of the medication as above, going on in this fashion.

The treatment was started on January 4, and the bleeding stopped on the third day. On the thirteenth day of the treatment, the infiltration of the posterior portion of the portio vaginalis had entirely disappeared. On the nineteenth day the headache ceased. On March 10 (the sixty-fifth day of treatment) the anterior part of the portio vaginalis was completely covered by healthy mucous membrane and no trace of the tumor was visible. On March 25 the posterior portio vaginalis was entirely healed.

In this case the erythrocyte sedimentation rate was from 6 to 7 millimeters per hour throughout, with little or no change. As a general rule, P.O.U. hormone does not affect the sedimentation rate of cancer patients in an early stage of the disease.

After her recovery, this patient studied and obtained a midwife certificate and now, two years and eight months later, is practicing her profession and enjoying good health.

Comments

These few typical case reports show that umbilical cord hormone (P.O.U.), given to cancer patients, brings about various demonstrable physical changes, prolongs the patient's life and appears, finally, to cure the cancer.

As this hormone seems to be widely distributed in the animal and vegetable worlds, animals normally take it in, unconsciously, with their food, but insufficiency of the hormone is at times brought about by the way food is cooked. At the menopause, when the corpora lutea cease to function, the supply of P.O.U. hormone is decreased. If, during such periods of hormone deficiency, a person is subjected to continuing local irritation, cancer is apt to result.

My contention can, therefore, be reduced to this statement: Insufficiency of P.O.U. hormone, plus irritation, equals cancer development.

P.O.U. in Conditions Other Than Cancer

Since P.O.U. hormone is a substance for analyzing albumin, small quantities by mouth have a remarkable effect upon the heart which is embarrassed by the accumulation of albuminous waste-products in the blood.

Indigestion (vomiting) of pregnancy will often be completely cured by one injection of P.O.U. hormone.

Pigment deposits in the skin are frequently cleared up by this remedy.

Cervical erosion, which is considered very difficult to treat, can be entirely relieved, in from two to three weeks, by P.O.U. hormone, injected or given by mouth.

Conclusions

1.—I advance the theory that the umbilical cord is an organ of internal secretion.

2.—The umbilical cord hormone dissolves abnormal albuminous substances in the body and destroys the products of such dissolution. It, therefore (among other functions), purifies the blood in the umbilical vein of the fetus.

3.—This hormone dissolves cancer cells (which are very similar to the embryonic cells of the fetus) and destroys the split-products. It, therefore, has the power of curing malignant tumors in human beings.

4.—P.O.U. hormone has a good effect on erosion of the uterine cervix and vomiting of pregnancy, and is useful for the removal of pigmentary deposits in the skin.

PRENATAL CARE

Far and above a technical knowledge of prenatal care, there is needed a willingness to practice prenatal care—a willingness of patient and physician—and it is up to us as a profession to put our house in order and then to help the various active agencies to educate the mothers. The largest service of the well trained obstetrical specialist lies in the distribution of his obstetrical knowledge. Our country is humanitarian-minded and unless we measure up to what is expected of us, we shall be weighed in the balance and found wanting.—Dr. J. R. McCord, *of Atlanta, in* Southern M. J., *Feb.*, 1932.

HOW BUREAUS FUNCTION

Whenever the Congress entrusts any function to any government bureau, it never disturbs that function with the consent of the bureau. . . . If the Congress gave them a little function to perform, they not only will not surrender it, but they come before the next session of the Congress asking that the functions be extended, and that they may have more employees and another bureau to help them carry on.—Senator Tom Connally, of Texas.

PHYSICAL THERAPY AND RADIOLOGY

Indications For Radiation Therapy In Carcinoma of the Cervix Uteri*

By Henry Schmitz, M.D., Chicago, Ill.
Professor of Gynecology, Loyola University School of Medicine

AT THE END of 1928, 662 private cases of carcinomas of the female genitalia had been treated with radiations. The charity cases, which were included in all former reports, have been omitted as they have been transferred to the tumor clinics of the Mercy Free Dispensary and the Cook County Hospital. Among the 662 cases were 502 primary and 160 recurrent carcinomas. Table I shows the number and percent of the cases for the various regions of the genital tract. It is seen that 80 percent of the carcinomas were in the cervix. Therefore, control of malignant diseases of the female genitalia must be centered in the early recognition and immediate, adequate treatment of cervical carcinomas.

Statistics prove that early, localized carcinomas, adequately treated, have a five-year curability rate of 80 to 90 percent. Clinical research, comprising the earliest tissue changes leading to malignancy and the symptoms and signs of early beginning cancer nodules, has brought about greater progress in the diagnosis and prognosis of cancer than have all other investigations. The results of clinical research and the consequent improved methods of diagnosis should become the common property of the entire medical profession. The control of cancer can be achieved only by wholehearted cooperation between the general practitioner and the specialist.

The treatment of carcinomas of the uterine cervix may be surgical, radiologic or medical. Surgery is indicated when the entire growth can be radically removed. Irradiations are employed when it is possible to apply an adequate radiation tissue dose to the entire malignant growth. An adequate radiation tissue dose means a known radiation intensity, homogeneously distributed within the entire tumor-bearing area and capable of

*Read before the Chicago Medical Society, November 8, 1933.

TABLE I. NUMBER AND PERCENT OF CARCINOMAS OF THE FEMALE GENITALIA FOR PRIMARY AND RECURRENT MALIGNANT TUMORS

Region	Primary Carcinomas		Recurrent Carcinomas		Total Carcinomas	
	Number	Percent	Number	Percent	Number	Percent
Vulva	20	3.98	6	3.75	26	3.95
Vagina	7	1.39	2	1.25	9	1.16
Cervix Uteri	398	79.28	129	80.63	527	79.61
Corpus Uteri	38	7.60	5	3.13	43	6.50
Ovaria	39	7.75	18	11.31	57	8.78
Total	502		160		662	

arresting or destroying the tumor cells. Medical treatment is necessary to prepare the patient for treatment, to enable the patient to pass safely through the period of treatment, and to assist the patient during the convalescence to a speedy recovery. Further, should the carcinoma have advanced so far that surgery and radiologic treatment are useless, then palliative treatment should be given, which consists in medical management of infection, toxemia and so forth, and radiologic and surgical procedures for the relief of pain.

Diagnosis

The selection of remedial measures, whether surgery or radiology, depends mainly on the extent of the growth, but also on local and general systemic complications. The extent of the growth can be elicited by answering the following questions by a physical examination:

1.—Is the cancer clearly localized? A growth about 1 cm. in diameter and normal mobility of the uterus are the two characteristics of a clear localization of the cancer. Normal mobility of the uterus is tested by traction on a tenaculum forceps attached to the cervix. If the cervix can be displaced downward to the vaginal outlet without any distress to the patient then mobility of the uterus is normal.

2.—Does doubt exist as to localization? An edematous consistency and loss of elasticity of the paracervical tissues are felt on recto-abdominal palpation. The uterus cannot be displaced downwards to the introitus by traction on the cervix.

3.—Are the parametria and regional lymph nodes involved and is the tumor, as a whole, movable or fixed? Recto-abdominal palpation is required to determine parametrial involvement. The patient should be anesthetized and the anus dilated to enable the examining finger to reach the brim of the pelvis at the bifurcation of the common iliac, to palpate the hypogastric and external iliac lymph nodes.

4.—Have extensions or metastases occurred in the bladder, the rectum and vagina? They can be elicited by bimanual palpation, cystoscopy, proctoscopy and vaginoscopy.

5.—Have distant metastases occurred? They are determined by the history, general physical examination and diagnostic roentgen-ray procedures.

The answers to these five questions permit a clinical grouping of the carcinomas, thus: Clinical Group I, the clearly localized growth; Clinical Group II, the doubtfully localized growth; Clinical Group III, the invasive growth, characterized by parametrial and gland invasion (however, the tumor mass is not fixed); Clinical Group IV, the fixed and disseminated growth, including (a) the "frozen pelvis"; (b) invasion or metastazation of vagina, bladder or rectum; (c) distant metastases.

Inflammatory infiltration and tumors of the adnexa may complicate a cervical carcinoma. Nodular infiltration of the parametria, continuation of the cervix tumor with the parametrial masses, absence of displacement of the uterus either upwards, downwards or sidewards, are characteristic for cancer. Uniform induration of the adnexa, with a line of demarcation between the uterus and the inflammatory mass, early fixation and gradual resolution with return of mobility are indicative of adnexitis. Ovarian, ligamentous and uterine tumors may cause displacement of the uterus and loss of mobility, though the carcinoma may be in the clearly localized stages.

Indications

The clinical grouping determines the indicated method of treatment. Clinical Group I carcinomas may be subjected to radical panhysterectomy or to radical radiation treatment. Clinical Group II cancers indicate radical radiation treatment. Clinical Group III carcinomas indicate radical radiation treatment. Clinical Group IV carcinomas are treated palliatively. Radium may be inserted for the arrest of bleeding: From 1,800 to 2,400 mg. element hours of radium are used in the crater; roentgen-ray therapy may be used to relieve pain; while presacral sympathectomy may arrest otherwise intractable pains, caused by pressure on or invasion of the pelvic nerves. Local cleanliness, nourishing food, sunshine and medical management are equally important in all the clinical groups. Radical radiation treatment comprises the use of radium locally and of roentgen-rays distantly, to at least two fields: an anterior pubic and a posterior sacral field.

Operability depends upon the following factors: (1) normal mobility; (2 patency of the cervical canal; (3) afebrility; (4) sterile uterine and vaginal secretion; and (5) good surgical risk.

The determination of mobility has been given. Patency of the cervical canal is tested by dilatation. The escape of serous, hemorrhagic or purulent fluid is evidence of a retention due to atresia or stenosis of the cervical canal. Afebrility means absence of infectious processes, either local or systemic. Corroboration of infection is obtained by a high leukocyte count and a rapid sedimentation time of the red blood corpuscles. The pathogenicity of the cervical secretion is tested by the inoculation of 5 cc. of defibrinated blood obtained from the patient's arm vein with the cervical secretion, and incubation for four hours. The growth of colonies

of bacteria is evidence of the presence of pathogenic bacteria. Bad surgical risks depend upon many factors, such as metabolic disturbances, renal, cardiac, hepatic and pulmonic diseases, severe degrees of anemia, and so forth. The presence of any one of these complications contraindicates surgery. Some of the conditions may be overcome by proper medical management and operation may then be performed.

Radiation therapy is *contraindicated* in the presence of: (1) General emaciation, cachexia and toxemia due to absorption of waste products. Radiation almost invariably aggrevates these states; (2) anemia with a red cell count below 3,000,000, a hemoglobin percentage below 50, and a leukocyte count below 3,000. Radiations may cause an increase in these conditions to a danger point; (3) impaired nitrogen metabolism. Radiations may produce a rapidly increasing N retention due to the liberation of proteins, especially in advanced cases. This may assume dangerous proportions in the presence of an already impaired N metabolism; (4) invasion of the urinary or rectal tract. Radiations, especially radium, lead to a rapid destruction of cancerous tissues and subsequent formation of fistula; (5) the presence of infection. Local manipulations contribute to a spread or reactivation, especially when radium is used. Roentgen-rays, however, may be applied, but should be stopped if a rise in temperature ensues.

The rules given in the preceding paragraphs have been carefully observed. Since 1917 operations have been discarded entirely. In this year a survey of the three-year end results showed that clearly localized carcinomas, treated with radiations but contraindicating surgery, had remained well anatomically and subjectively. Hence operations were entirely discarded. The five-year good end results tabulated in the following table therefore represent the result of radiation treatment in carcinomas of the cervix.

It is evident that the good results of treatment could be increased at least three fold if patients came for treatment during the early, or Clinical Group I and II, stages. These, however, can only be discovered by a careful pelvic examination of every woman patient coming to a physician's office. Stated re-examinations after infections, abortions and labors, until involution is complete and chronic tissue changes have been adequately treated, and periodic health surveys including examination of the pelvic organs, preferably on the client's birthday, are the only means to prevent cancer and to discover it in the early, socalled silent stage.

TABLE II

GROUP	I	II	III	IV
Number of Cases	36	53	180	129
Percent of Total Number of Cases	9.27	13.25	45.23	32.25
Five Year Good End Results	31	25	33	1
Percent of 5 Year Good End Results	87.87	47.17	17.78	0.78
Total number of cases is 398 Total number of 5-year cures is 90 or 22.67 percent.				

Chronic cervicitis is the precursor of carcinoma of the cervix. It should be adequately treated whenever found, whether it causes or does not cause symptoms. Routine microscopic examination of all the tissues obtained during operative procedures on the cervix is the only safe method to determine the true nature of the pathologic process.

Conclusions

The treatment of carcinoma of the cervix should be based on the extent of the growth. Surgery is indicated in the clearly localized carcinomas which can be radically and completely removed by operation. All other cases should be treated by adequate radiation therapy. Due to the delay in consulting the physician and to the avoidable delay in making an immediate diagnosis, more than 90 percent of patients have clear indications for radiation therapy, as the tumor has grown too widely for surgical eradication.

The recognition during routine physical examinations and the adequate treatment of chronic cervicitides which result from infections, abortions and labors, will remove the chronic tissue changes which almost invariably precede malignant tissue changes.

Periodic health examinations, best at six-month intervals, will enable the physician to detect early and therefore curable cancers.

The rational treatment of chronic cervicitides and the discovery of early cancer nodules by periodic health examinations and their immediate and adequate treatment are the only means to attain control of carcinoma of the uterine cervix, as about eighty percent of the early, silent and clearly localized carcinomas show five-year good end results from radiation treatment.

2537 Prairie Ave.

NOTES AND ABSTRACTS

Abortive Treatment of Threatened Colon Cancer*

ANY impairment of normal colon flexibility, when neglected, leads to degenerative changes. Any dysfunction, caused by an abnormal position — dilatation, elongation, kinking—of the colon, is liable to result in exactly the same degenerative changes as occur in other parts of the body. These frequently occur at the sigmoid and also by the acute angulations at the hepatic and splenic flexures. There is a likelihood of cancer developing at these points.

Medical treatment, in these cases can be only symptomatic. Surgery is doing much to prolong life in selected cases, but the mortality is so great, even where cancer is not actually in evidence, that physical measures are often preferable and frequently avert a hazardous surgical operation.

Physical treatment may be any form of exercise that will help change the threatened colon kinks into curves or decrease colonic toxicity at the debilitated sections. Exercise and manual massage will often do much to stimulate peristalsis, if the patient is thin. The static wave current, applied to sections of the abdomen, has been used also with more or less benefit. These conclusions are based on a large clinical experience.

FREDERICK H. MORSE, M.D.

Boston, Mass.

Ultraviolet Radiation As an Aid in the Prevention of Common Colds†

EXPERIMENTS on students known to be susceptible to seasonal "colds," carried out by the Cornell University Medical Department for several years, have shown that there was a reduction, varying from 40 to 55 percent, in both the number and severity of colds, in irradiated groups of students, as compared with groups not irradiated.

The irradiation was carried out systematically in a specially constructed solarium, fitted with Cooper-Hewitt and other lamps. The maximum exposure in all positions was 15 minutes. In addition to the irradiation, the men were given a package containing a mixture of alkalies—sodium bicarbonate and magnesium carbonate in equal parts—with instructions to take a teaspoonful twice a day for 2 days whenever a cold threatened.

We also limited the number of those having serious trouble from colds; this group included many chronic cases of sinus and other respiratory infections.

GEO. H. MAUGHAN, PH.D.

Ithaca, N. Y.

*Arch. Phys. Therap., X-Ray, Radium, May, 1933.

†Arch. Phys. Therap., X-Ray, Radium, June, 1933.

BOOKS

Waters and Kaplan: Year Book of Radiology

THE 1933 YEAR BOOK OF RADIOLOGY. *DIAGNOSIS, Edited by Charles A. Waters, M.D., Associate in Roentgenology, Johns Hopkins University. THERAPEUTICS, Edited by Ira I. Kaplan, B.Sc., M.D., Director, Division of Cancer, Department of Hospitals, City of New York; Clinical Professor of Surgery, New York University and Bellevue Medical College. Chicago: The Year Book Publishers, Inc., 304 South Dearborn Street. Price $7.00.*

This is the second edition of the Year Book of Radiology, the first edition having been published in 1932. The enthusiastic reception of the first edition throughout Europe and America has warranted the issuance of this volume.

The 1933 edition contains 800 pages, 777 illustrations, and presents the gist of 690 published articles. It represents the latest work, with its practical details, of virtually every leading radiologist of Europe and America. It is intended primarily for those radiologic practitioners who do not have access to a large library, and for them it should be a source of ready reference. It should also appeal to all students and other practitioners who want the collected material on any radiologic subject, either diagnostic or therapeutic. The work is comprehensive, presenting an extensive investigation of all American and foreign literature. The editorial comments are terse and to the point, giving accepted conclusions and opinions in a few words or sentences.

Part I, devoted to Radiologic Diagnosis, comprises 439 pages; Part II, devoted to Radiotherapeutics, 333 pages. The diagnostic value of the book is dependent upon its illustrations, which are kept in closest relationship to the text. This relationship in this second edition is much closer than it was in the first. The Year Book of Radiology deserves generous support. It offers the quickest and least expensive way for the radiologist to keep pace with progress in his own and in other branches of medicine.

STOMATOLOGY

OFFICIAL ORGAN OF THE
AMERICAN SOCIETY OF STOMATOLOGISTS

ASSOCIATE EDITOR
ALFRED J. ASGIS, ScB., M.A., D.D.S.

Diagnosis and Treatment of Neoplasms by the Oral Clinician

(A Case Report)

By Irving Salman, D.D.S., New York City

Chief, Major Oral Surgery Clinic, New York University College of Dentistry; Attending Oral Surgeon, Montefiore Hospital; Consulting Dental Surgeon, Harlem Hospital

THE advancement of clinical dentistry in the past few years is bringing our profession into closer alliance with medicine, where it rightfully belongs. It is through frequent medico-dental meetings and by direct contact of physician and oral clinician in hospital service, that the two fields of health service will be properly correlated.

In undergraduate teaching, the need for more medical knowledge in dentistry and for more dental subjects in medicine has already been met by instituting, at New York University, suitable courses. At Montefiore Hospital, every patient is thoroughly examined by the dental department, to complete the medical examination. Any lesion in the oral cavity is referred to the dental department for diagnosis and consultation on treatment.

This closer relationship of the health professions will result in developing better dentists and physicians. No longer will the dental surgeon be considered from the standpoint of tooth repair only; nor will the physician consider an examination complete without referring the patient for an oral examination.

The problem of diagnosis of growths of the mouth is that of the oral clinician. While cancer is the problem for the general physician and specialist, cancer of the mouth is seen most frequently by the dental surgeon and its prevention is a problem for the dental profession to solve.

In order to recognize and treat oral lesions, it is necessary to know what effects general disease may exert on the oral cavity, and also what effects diseases of the oral cavity have on the rest of the body. Too often do we consider lesions in the mouth from a local standpoint only. I have seen cases where oral lesions have been treated locally by dentists, not realizing that the conditions were manifestations of general disease. I have also seen cases referred by physicians for tooth removal because the tooth was loose, not realizing that the mobility of the tooth was caused by the presence of a growth or fracture of a jaw.

Case Report

(September 26, 1933)

D.O., female, age 27, married, housewife.

Past History: No history of childhood diseases. Patient married nine years and has three children, the youngest three years of age. No history of any miscarriages.

Present History: The patient was conscious of a bulging and growing mass in the upper left side of the mouth for about nine months. She did not seek any medical or dental services, for fear that this might prove to be a cancer. In the past month she noticed that an upper molar tooth was becoming loose and, about September 15, when she developed some discomfort in eating, she sought the services of her physician, who referred her to her dentist for removal of the tooth and thought her condition or infection, as he called it, was all due to the offending molar. Her dentist removed the upper first molar and referred her to me for diagnosis and treatment.

The patient had suffered from severe headaches for the past two years and had lost 15 pounds in weight in the past two months.

Clinical Examination: A cauliflower growth extended from the upper left first bicuspid to the left third molar, with marked bulging

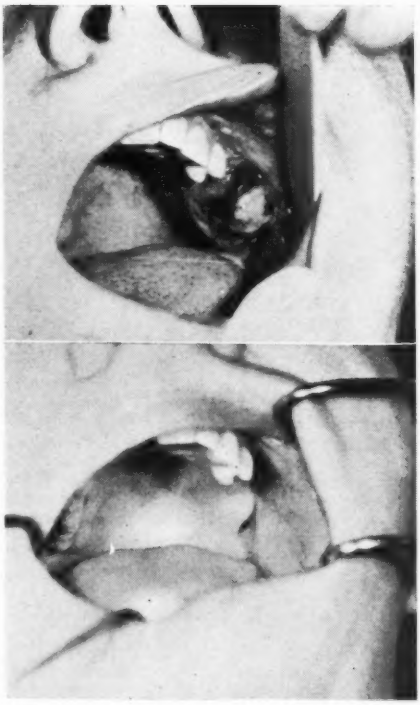

Fig. 1 (Above): Showing Growth before Operation.
Fig. 2: Condition Six Weeks After Operation.

on the palatal and buccal surfaces (see Fig. 1). This growth extended downward, as if growing down from the maxillary sinus. The upper left third molar, in position (the second molar was removed by her dentist), showed marked mobility. There was no pain nor bleeding. No adenopathy was present.

Radiographic Examination:

1. Bite film of the upper jaw showed marked destruction of bone and extension of the growth into the maxillary sinus.

2. The P. A. plate showed the growth extending into the antrum, as if pushing the floor upward, filling one-half of the sinus.

Wassermann Examination: Oct. 3, 1933, negative.

Clinical Diagnosis: Fibroma or Sarcoma.

Biopsy Report: Sept. 27, 1933, myxofibroma.

Operative Note: Oct. 6, 1933. Under local anesthesia, complete removal of growth was accomplished. This was a thick, fibrous mass, extending into the antrum, the size being about that of a small apple. There was very little bleeding. The growth was somewhat circumscribed. A dressing was inserted.

Post Operative Note: The dressing was changed daily for ten days, and on Nov. 6 the patient was discharged, with orders to report in six weeks for further observation.

On January 8, 1934 the tissues appeared normal (see Fig. 2) and the roentgenograms were negative. She was completely relieved of headaches and had gained ten pounds in weight.

57 W. 57th St.

DIAGNOSTIC AND THERAPEUTIC NOTES

The Possibility of Precancerous Oral Lesions from Electrical Causes*

AMONG the many sources of irritation which can be considered as possible factors in the production of precancerous and cancerous lesions in the oral cavity may be included the electrical irritation effect produced by some combinations of metals used for filling teeth and constructing other dental restorations.

1.—Our observations, as well as those of other investigators, indicate the possibility of production of benign, precancerous and malignant oral lesions from the effect of electrical irritation of some combinations of metals used for restoring lost tooth structure.

2.—Local action is of more consequence as an exciting etiologic factor in the production of such lesions than the possibility of the flow of current from one restoration to another.

3.—The influence exerted by other factors, such as hydrogen-ion concentration, conductivity, cataphoresis and chemical composition of the saliva, on local action, is of great importance.

HAROLD ARTHUR SOLOMON, D.D.S.,
MELVIN G. REINHARD, M.A., and
HERBERT I. GOODALE.
Buffalo, N. Y.

*Dent. Digest, Apr., 1933.

Tumors of Special Interest to the Dentist*

BY A CRITICAL analysis of the pathologic findings, in a series of 1,150 specimens of tissue removed by our oral surgery depart-

*Dent. Cosmos, July, 1933.

ment, in which we have selected 575 socalled tumors, we have endeavored to show that:

1.—Histopathologic examinations of tissues removed from the oral cavity should be made primarily as an aid in diagnosis and prognosis.

2.—Most of them are inflammatory hyperplasias and are not true tumors.

3.—An accurate study of the influence of age, sex, duration and location is of great practical value in leading to a better understanding.

4.—Connective tissue hyperplasias, cysts and cancers make up our main problems.

Our conclusion is that fact-finding studies along these lines should be made, which will be of value proportionate to the number of facts found; and that solutions of many dental problems lie along such lines.

CHARLES G. DARLINGTON, M.D.
New York, N. Y.

Stomatology Hospital Departments Needed*

AS IS well known, fractures of the jaw require special nursing, for very important reasons. A great part of these fractures are really compound and liable to infection of the bone marrow, requiring very particular care of the mouth, such as can only be carried out in a hospital department.

Besides the great waste of time and strain on part of the staff, it is also injurious to the patient when he must be treated as an out-patient and sent backwards and forwards during his illness. The therapeutic success may also be prejudiced in such case, since there is no direct contact between the hospital physician treating the patient and the stomatologist. As a result, it will be difficult to get a history of the case without omissions. This trouble can only be obviated by attaching stomatologic departments to the hospitals.

Pathologic changes of the oral mucosa often turn out to be symptoms of general disease—early symptoms of a hematopoiesis, which may appear in the mouth in the form of severe ulceration. Only too often do these come into the hands of the stomatologist, whose suspicions of a hemotopoietic disease may be aroused from the single clinical symptom of ulceration of the mucous membrane. From what has been said it emerges that the stomatologist, as the result of the oral symptoms, may, with advantage, frequently consult with the internist.

Cooperation between the stomatologist and the other medical specialists is unthinkable without a suitable organization. As a basis, we can find nothing better than the provision of a stomatologic hospital department which, if placed on an equal footing with the other medical departments, will act in the interest of those great masses of poor patients which require them most.

PROFESSOR JOSEF SZABO.
Budapest, Hungary.

Nosokomeion (International Hospital Review, IV, 2, 1933.)

BOOKS

Hanke: Diet and Dental Health

DIET AND DENTAL HEALTH. *By Milton T. Hanke. Chicago: The University of Chicago Press. 1933. Price $4.00.*

This book is a presentation of the results obtained by the author in his investigation of the relation of nutrition to dental health, sponsored by the Chicago Dental Research Club, the Otho S. A. Sprague Memorial Institute at the University of Chicago, and partly financed by the California Fruit Growers Exchange. It is an outstanding example of the thorough, diligent and time-consuming work along clinical lines which is necessary in order that nutritional disorders and nutritional requirements may be better understood. The extensive study of the dental condition in relation to general health of 440 children at Mooseheart, over a period of three years, may justly be called a great task. The book is unquestionably of value, not only scientifically but also practically, to the dentist and the physician who, today more than ever, is cognizant of the fact that nutrition is of primary importance to health. Not only will it be of help in daily practice, but it will undoubtedly stimulate further research along the line of practical application of diet and administration of essential nutritional factors, for the prevention of malnutrition and for the restoration of health in patients who display dental or other disorders due to nutritional disturbances.

The work is particularly instructive to the dentist, in that it gives clear descriptions of dental structures and dental diseases, with marvelous illustrations in color (reproductions of color-photographs taken by the author) of some of the most characteristic cases selected from the large number of patients under investigation; also 67 pages of detailed records, arranged in tabular form, on 341 children included in the test group.

Doctor Hanke has for many years been interested in the beneficial effect of orange, lemon and other fruit juices, along with a carefully chosen diet, in certain dental disorders, and has suspected that some of these may be due to a deficiency in vitamin C. It is to be hoped that he may have further opportunities to continue these studies with pure vitamin C. It is logical to assume that vitamin C may be the responsible factor, or one of them; but, as in the case of all vitamins, definite information can be obtained only from investigation with the pure substance.

C. N.

A LIVING FOR THE DOCTOR

Radio Practice of Medicine

INNUMERABLE have been the parasites which have preyed upon the practice of medicine. Quacks and charlatans of every description have blackened the records of medical history; cults and isms have done their part in leading the credulous public astray; faith doctors, healers, advertisers have joined in the ruthless invasion of the medical field. And yet, scientific medicine has steadily forged ahead, notwithstanding that many of its earnest and devoted followers have suffered loss and privation because of the ravages of these unscrupulous adventurers.

Through the efforts of organized medicine in the past many of these nefarious practices have been suppressed. The moral and religious elements in the control of disease have been largely discountenanced. Most of the leading newspapers of the country refuse to publish quack medical advertisements. The State Boards of Medical Registration keep up a relentless war upon unlicensed medical practitioners; and the numerous medical journals thunder their editorial denunciations over the length and breadth of the land. This educational campaign to train the public to know and appreciate the value of legitimate and scientific medicine and the dangers of advertising quacks goes steadily on.

Notwithstanding these efforts, however, the ever alert and tireless medical parasites constantly find new fields and avenues of encroachment; and notwithstanding the educational campaign to which we have referred the public still flocks away from legitimate medicine to the fallaciously vaunted "promised land" of charlatanism. It seems at times like effort thrown away, an uphill losing fight.

The latest inroad upon the practice of medicine has come through the radio. Even the best of the broadcasting stations have admitted to their schedules medical advertisers who are practising medicine openly and shamelessly and, moreover, with all the earmarks of the quack. The remedy advertised is invariably a positive cure for the indicated affection. "Just go to your nearest druggist and ask for a free sample." There is no advice to visit the family doctor. "If you do not receive satisfaction you can get your money back." But just try to get your money back!

Neuralgias, backaches, headaches, indigestion, dyspepsia, pyorrhea, constipation, hemorrhoids, leg ulcers ("cured without operation")—these are only a few of the affections mentioned, and the endless list goes on *ad nauseam*.

This practice of medicine over the radio is a peculiarly pernicious infringement of the Medical Practice Act. In two respects, especially, is this so. The radio advertisement of drugs and medical treatment is vastly more effective than is the newspaper advertisement, by reason of the wide extent of its publicity. The newspaper advertisement is largely limited to the community in which the paper is published. Only to a very limited extent does it reach beyond the municipality which the paper serves. On the contrary, the radio advertisement knows no bounds, not even the boundaries of the country itself, but extends to other lands the world over. The deplorable results of such widespread publicity cannot, and should not, be underestimated. Even those who never read the advertising pages or columns of the papers are, perforce, compelled to hear the merits, or demerits, of the drug extolled, and many are unconsciously influenced thereby.

Again, the radio brings into play a very potent element—personal contact. The human voice, especially when it conveys the impression of personal sympathy and assurance, is much more powerful in swaying the public than is the written word. It is for this reason that public orators influence their hearers and sway their audiences as the most eloquent and forceful writing cannot begin to do. The audience, too, is nation-wide and world-wide—an audience that the most noted and persuasive speaker cannot hope to reach. In these two respects, therefore, the radio advertisement of medical treatment must be

recognized as more dangerous and devastating to legitimate medicine than all the newspaper advertisement have ever been.

Yet, action has been taken by Organized Medicine against quack medical newspaper advertisement, while nothing has been done to antagonize and stop the more pernicious radio practice of medicine. This may be due to the fact that the attention of the medical authorities has not been called to this evil, or to a lack of initiative on the part of those most concerned. Whatever the reason, it remains true, however, that unless speedy action is taken by Organized Medicine to correct this very important and serious matter, the medical authorities must be open to the charge of failing to do their duty.

W. A. NEWMAN DORLAND, M.D.

NOTES AND ABSTRACTS

Medico-Legal Items

The Doctor's Automobile and the Horse and Buggy

COMMENTING on the decision of the Louisiana Court of Appeals, to the effect that the doctor's automobile is one of his "tools of trade" and therefore not liable to seizure for debt, which appeared in this column recently, a California physician writes to say that the California courts have not taken this view of the doctor's automobile as one of his tools. The California law, it appears, exempts his horse and buggy, but since an auto is neither a horse nor a buggy, the jurists of that State have declared in their Solomonic wisdom that the law does not apply to his auto. This physician wants to know how to have the law changed so that the auto will be exempted from seizure for debt.

So far as we know, only the State legislature can change the law, if the judges are not clear-sighted enough to recognize that the doctor's auto is as much a tool of his trade as his horse and buggy were before the auto was invented. As a mere medical man, it seems absurd to the present writer to draw the distinction that these courts have drawn. It simply indicates that the California courts have adhered to the letter of the law in utter disregard of the spirit. We do not know what can be done about it. If the California doctors cannot rise in their might and get that law changed, no one else can do it for them.

The Broken Hypodermic Needle and Professional Negligence

The law generally does not hold the physician responsible for such an accident as the breaking of a needle in the body, but leaves it to the jury, as a question of fact, to determine whether or not the needle broke because of the doctor's negligence or carelessness, and whether or not his conduct of the case after the accident was such as to come under the head of negligence. In a case which recently came before the court for trial, it was held (Massachusetts) that the mere fact that the needle broke in the patient's gum was not necessarily an evidence of negligence on the part of the doctor. It was for the jury to decide that. It was also for the jury to decide whether the doctor was negligent in removing the needle at once, or permitting it to remain, or even to tell the patient about the accident or not to tell him—all of these matters are questions of fact which come within the province of the jury.

The point of the matter is that the courts generally recognize that such accidents as these may happen, even under the most careful attention to details. A new needle never used before may snap because of a slight movement of the patient or some quick movement of the doctor's hands—all of which do not constitute negligence.

We doctors must be careful with our needles, particularly to see that they are firm and without defect. It is even advisable to let the patient see that you are testing the needle before you use it. That gives him confidence and also protects you against the charge of negligence which will almost certainly be brought if the needle should happen to break. Furthermore, if the needle does break, the wise thing to do is to make every reasonable effort to locate it and recover the broken part. Whether one succeeds or not, at least an honest effort has been made, and that is all that the law requires of any physician at any time.

Has the Doctor a Right to Abandon a Case?

Doctors are charged, now and then, with abandoning a case, thus laying the basis for a suit for damages. What is the doctor's duty when he wishes to discontinue treatment of a given patient? He must notify his patient that he will no longer render medical service or assume responsibility for the case. This is done preferably in the presence of a witness

or in writing, as a matter of self-protection. If he fails to give due notice of his leaving the case, he may be charged rightfully with abandonment and thereby invite a suit for damages. The courts generally favor the patient in such cases, because it is generally accepted that when a doctor undertakes the treatment of a case, it is his moral and legal duty to take care of that case until he is expressly relieved by the patient or some responsible person acting for him. If the doctor wishes to leave the case, he must give due notice of that desire. No one can compel his attendance, but it is his duty to see to it that the patient knows of his wish to be relieved of responsibility so he can obtain another doctor's service. It is most unwise to employ indefinite words or actions which leave wide open loopholes for later malpractice charges on the ground of negligent abandonment of the case.

Deceptive Malpractice Insurance Policies:

When the doctor contracts for malpractice insurance he should be on his guard and read his policy carefully. Most doctors would do well to submit their policies to their attorneys before signing on the dotted line. It is not because the companies are unreliable and not dependable, but because of the wording of the policy which might leave the doctor in a mighty deep hole just when he needs his protection most. For example, when you buy a policy which agrees to "indemnify" you, the protection may prove to be a delusion and a snare, because that means that the doctor must pay for his defense and the costs of the trial and then get it back from the insuring company—and that is not always an easy thing to do. This is especially true if the company is not one hundred percent responsible and makes a habit of avoiding payment whenever it can be done. And there are such companies.

When the doctor wants real protection he must be careful to see that he is getting "actual defense" and not indemnification. In that event, his case is defended by the company, his costs are met by the company, and any judgments levied against him, up to the face of his policy, are paid by the company. That is defense; indemnification is something else again.

Cash—and No Bills*

WHEN times were good, I made plenty of money from my practice. Now things are different and I have ceased figuring how much I can get out of my patients and am concentrating on how much I can give them for whatever they are able to pay.

Office fees cannot be reduced below a certain limit (which most people are able to pay), but surgical fees can be cut down *ad libitum*.

The question of approach is important. When a patient comes to me who needs an operation, in inquiring into his financial circumstances, I tell him the usual fee for such services, and ask him how much he can pay —*cash on the nail*. I promise him that I will never send him a bill for the difference, and leave it as a moral obligation upon him to pay the rest, when, as and if he is able.

In this way I am collecting a sure cash income sufficient to meet my expenses, making many friends, and finding that these moral obligations are binding upon a surprising number of people. Most people are honest and sincerely want to pay their doctors as soon as they can.

This plan has eliminated all credit bookkeeping and brought me a quantity of gratitude far beyond my expectations.

ANONYMOUS M.D.

*Med. Economics, Nov., 1933.

The Penalty of Leadership*

IN EVERY field of human endeavor, he that is first must perpetually live in the white light of publicity. Whether the leadership be vested in a man or in a manufactured product, emulation and envy are ever at work. In art, in literature, in music, in industry, the reward and the punishment are always the same. The reward is widespread recognition; the punishment, fierce denial and detraction. When a man's work becomes a standard for the whole world, it also becomes a target for the shafts of the envious few. If his work be merely mediocre, he will be left severely alone—if he achieve a masterpiece, it will set a million tongues a-wagging.

Jealousy does not protrude its forked tongue at the artist who produces a commonplace painting. Whatsoever you write or paint or play or sing or build, no one will strive to surpass or to slander you, unless your work be stamped with the seal of genius. Long, long after a great work or a good work has been done, those who are disappointed or envious continue to cry out that it cannot be done. Spiteful little voices in the domain of art were raised against our own Whistler as a mountebank, long after the big world had acclaimed him its greatest artistic genius. Multitudes flocked to Bayreuth to worship at the musical shrine of Wagner, while the little group of those whom he had dethroned and displaced argued angrily that he was no musician at all. The little world continued to protest that Fulton

*This, so far as we can learn, was originally written, as an advertisement for The Cadillac Motor Car Co. It contains a truth which applies to the physician, druggist or manufacturer, hence we reprint it here for our readers.—Editor's Note.

could never build a steamboat, while the big world flocked to the river banks to see his boat steam by.

The leader is assailed because he is a leader, and the effort to equal him is merely added proof of that leadership. Failing to equal or to excel, the follower seeks to depreciate and to destroy—but only confirms once more the superiority of that which he strives to supplant.

There is nothing new in this. It is as old as the world and as old as the human passions—envy, fear, greed, ambition, and the desire to surpass. And it all avails nothing. If the leader truly leads, he remains—the leader. Master-poet, master-painter, master-workman, each in his turn is assailed, and each holds his laurels through the ages.

That which is good or great makes itself known, no matter how loud the clamor of denial. That which deserves to live—lives.

CLINICAL MEDICINE AND SURGERY is the most practical journal published for the general practitioner.—J.K.B., M.D., Tenn.

Things Worth Owning

FIRST-CLASS bed.
Comfortable chair and footstool.
Sharp razor.
Good pipe.
Comfortable shoes.
New-model automobile.
Accurate watch.
Electric clock.
Adequate refrigerator.
Good reading lamp.
Modern radio and phonograph.
Small library of books worth reading.
Typewriter in good condition.
Ample supply of clothes.
Electric fan.

The foregoing items are a better investment than any stock or bond listed on the exchange. They pay dividends out of all proportion to their cost. Anyone who chooses to go without these common essentials of pleasant living in order to "save" money is making a mistake. A comfortable bed is worth more than four dollars a year, which is all that a safe hundred dollar bond yields.—*Little Journal for Pediatrists.*

Frozen Professional Credits

(A Set of Resolutions)

WHEREAS, the Government of the United States has been extending credit to many classes of the community which have been unable to secure loans or extensions in the ordinary course of business; and

Whereas, no such aid has been extended to professional men; and

Whereas, professional men, notably lawyers and doctors, must render service when required, regardless of the ability of the client or patient to pay; and

Whereas, most members of the legal and medical professions have rendered such service during the years of economic depression and now have upon their books charges for such service against clients and patients who are willing to pay but who are unable to secure funds, despite the ownership of property; and

Whereas, this condition has resulted in placing said professional men in serious financial straits, in that they must pay in money for certain of their facilities and the support of their families, while unable to collect sufficient sums in money from their debtors; and

Whereas, the debtors of the professional men, in the aggregate, consist of the most responsible portion of the community, whose credit in the aggregate is the foundation of all local credit;

Be It Resolved by The Lawyers Club of Los Angeles that the Congress and the President be importuned to act promptly for the relief of such professional men by setting up a system whereby the debtors of professional men, at least lawyers and doctors, may arrange long-credit terms upon obligations that will be discounted at a low rate of interest by a Federal agency, thus releasing to the professional men amounts of cash in return for the credits which are now but frozen assets; and

Be It Further Resolved that copies of the resolution be dispatched to the California delegation in Congress, the President of the United States and that the committee take such other steps to foster the spirit of the resolution as it or the Board of Governors may be advised.

EDUCATE THE PEOPLE

Law or no law to the contrary, thousands of corporations are practicing medicine in this country today, and the only way to stop it is to educate the public as to the dangers of such activities and as to what the practice of medicine really is.—MORRIS FISHBEIN, M.D., *Chicago.*

THE SEMINAR

(NOTE: Our readers are cordially invited to submit fully worked up problems to the Seminar and to take part in the discussion of any or all problems submitted.

Discussions should reach this office not later than the 1st of the month following the appearance of the problem.

Address all communications intended for this department to The Seminar, care CLINICAL MEDICINE AND SURGERY, North Chicago, Ill.)

Problem No. 1—1934 (Medical)

Presented by Dr. Herman J. Kooiker, Milaca, Minn.

(See CLIN. MED. & SURG., Jan., 1934, p. 41)

RECAPITULATION: A patient of 70 years had lost 20 to 30 pounds in weight in four months and complained of vague abdominal pains (sometimes cramp-like), and tenderness, with frequent thin, whitish stools. Proctoscopy showed marked reddening of the mucous membrane.

Laboratory tests showed moderate secondary anemia; negative Wassermann reaction; many microscopic fat particles in the stools; and a very large duodenal loop (by x-ray examination). The gall-bladder appeared, on the roentgenogram, to be diseased, and there were old, fibroid tuberculosis scars in the apex of the left lung.

Exploratory operation was under consideration, when the patient developed pneumonia and died in 48 hours.

Requirement: What was the probable diagnosis and what treatment might have helped?

Discussion by Dr. E. C. Junger, Soldier, Ia.

THIS is, no doubt, a cancer of the head of the pancreas, interfering with the emptying of the gall-bladder (hence light-colored stools) and with fat-digesting enzymes, thus causing diarrhea, fermentation and some weakness. A bowel that contains food not properly digested higher up is always irritated and the abdomen is tender.

The pneumonia had probably no connection with the malignant disease, unless debility can be blamed for allowing the pneumococcus a foothold. I believe that abnormal or defective body-chemistry gives disease germs a chance to incubate, and that disease is a result, not of germs *per se*, but of the condition that allows the germ to so multiply that they overcome the body's immunity.

Solution by Dr. Kooiker

THE pertinent findings at autopsy were as follows:

There was no excess fluid in the belly. The appendix was strictured at the base, the terminal portion being dilated and containing 15 cc. of material which looked like pus—or like the stools the patient had been passing.

The heart, blood-vessels and kidneys were about what one would expect in a man of 70 years.

The left pleural cavity contained about 250 cc. of turbid fluid, with flakes of fibrin. The upper lobe of the left lung showed typical consolidation of pneumococcic pneumonia; the lower lobes of both lungs were collapsed to the extent of 80 to 90 percent, without consolidation.

The spleen was normal in size and appearance. The liver weighed 1960 gm. and showed no marked abnormalities.

The esophagus and stomach were normal; the duodenum was reddened and its terminal portion attached to the pancreas by infiltration from a tumor of the latter organ; the small bowel was not invaded; but at the middle of the transverse colon the invasion involved all layers of the gut with two round, pedunculated, non-ulcerated masses (the larger 4 cm. in diameter) projecting into its lumen.

The *pancreas*, near its middle (to the left of the superior mesenteric vessels) was the seat of a round, very hard tumor, measuring 9 cm. in diameter, which infiltrated the organ extensively (except the head), as well as the left kidney and the duodenum and colon; but not the bile-ducts nor the lymph nodes of the mediastinum. The cut surface of this tumor was white, intermingled with yellowish areas.

Anatomic Diagnosis: (1) *Carcinoma of the body of the pancreas*, with extension into the duodenum, colon and left kidney; (2) General arteriosclerosis; (3) Lobar pneumonia, left upper lobe.

Comments on Problem No. 9, 1932

(C.M.&S., *Sept., p. 671, and Nov., p. 799, 1932*)

AFTER the discussion of my problem in CLIN. MED. AND SURG. for Nov. 1932, in which I mentioned that I had given a few doses of Dr. Houda's anti-goiter vaccine to a young woman showing a typical picture of severe toxic goiter, I continued to use that

preparation until I had given 65 injections, the last of which was on Apr. 29, 1933.

Within two weeks after beginning this treatment the patient showed marked improvement, and I stopped the Lugol's solution and digitalis which she had been receiving, giving only the vaccine. The improvement was steadily progressive and for more than a year she has been feeling as well as she ever did, looks the picture of health and has been doing heavy farm work. Every thyrotoxic symptom appears to have vanished, except a slight heart murmur and amenorrhea; but as she feels perfectly well, I am not attempting to treat these, hoping that nature will establish the endocrine balance.

F. H. RHOADES, M.D.

Problem No. 3 (Cancer)

Presented by Dr. F. D. LaRochelle, Springfield, Mass

A WOMAN, age 63, came to the hospital complaining of a large, ulcerated, foul-smelling mass, of eight years' duration, over the right eye. The original mass started in the upper eyelid and grew slowly at first, but during the past two years it has increased in size rapidly and the discharge from the superficial ulcer has become profuse. During the past year the right eye has become blind (see Fig. 1). The general health has not been impaired. She has consulted several physicians, but none made a precise diagnosis and no effective treatment was prescribed. The Wassermann reaction is negative. Sections made from a biopsy revealed basal-cell carcinoma. There are no metastases to the regional lymph nodes.

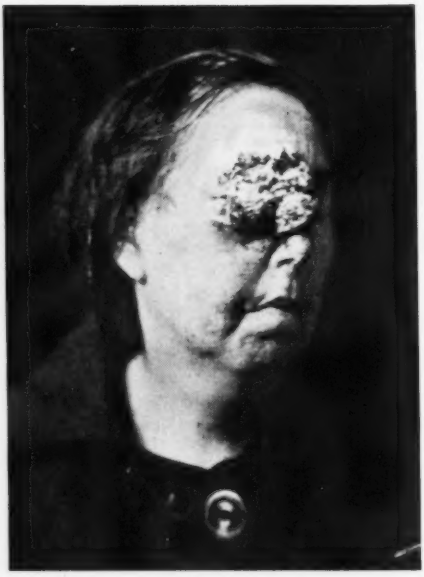

Fig. 1.

Requirement: What is the course to pursue?

THE CONSTITUTION AND THE DOLE

The expenditure of public funds for any form of private benefaction is a violation of a clear and definite principle of government as expressed in the Constitution, just as much a violation as to insist that two and two make three is a violation of the principle of mathematics. No amount of sophistry can controvert this statement. The Constitution does not provide that funds secured from the people for the purpose of maintaining a government designed to protect and defend the individual in the exercise of his rights, shall be employed for some other purpose. If the federal government can appropriate money for private benefactions, then it can appropriate money for anything it sees fit—to bet on horse races for instance. If it has the right to appropriate even one dollar for things not provided in the Constitution, then it has the right to appropriate every dollar in the treasury for whatever the Congress may say—for instance, ten billion dollars to build a bridge across the Atlantic ocean.—COMMITTEE ON AMERICAN EDUCATION.

A PHILOSOPHY OF LIFE

By the time a man is forty, he should have built up a philosophy of life that should be his most priceless possession. Without such a philosophy, riches, if he has them, will be a mockery, and poverty will be insupportable. —Little Journal for Pediatrists.

CLINICAL NOTES and ABSTRACTS

Early Diagnosis of Carcinoma of the Cervix*

DURING the last few years there has been developed a very simple test which is postive for the *absence* of squamous-cell carcinoma of the cervix. It was developed by Dr. Walter Schiller, at the University of Vienna. Eight papers have been written describing the procedure, the two best of which are by Dr. Schiller, published in *Surgery, Gynecology and Obstetrics* for February, 1933, and by the late Professor W. P. Graves, of Harvard, in *Surgery, Gynecology and Obstetrics* for January, 1933.

At least eighty-five percent of all carinomas of the uterus are squamous-cell carcinomas of the cervix, and no common symptom can be found, local or general, which is indicative of such early carcinomas. Out of twenty-two very early carcinomas of the cervix, less than eight millimeters in diameter, which Schiller reported two years ago, only two gave any indication of illness. Eighty-five to ninety percent of very small, early carcinomas of the cervix are curable.

The Schiller test is based upon the fact that normal "portio" epithelium contains in its outer layers large quantities of glycogen. Epithelium of the skin other than the vagina, however, does not contain glycogen, except in the early embryonic stages. The glycogen in all other skin disappears several weeks before birth.

Carcinomatous epithelium contains no glycogen. The minute a small carcinoma develops, glycogen disappears. Glycogen in the liver and muscles is soluble in water but this glycogen in the flat epithelium of the vagina is not soluble in water. Glycogen is found in some advanced carcinomas but only in traces and it, too, is soluble in water.

If we paint the portio and the vagina with a watery solution of iodine made up as follows:

Iodine	1
Potassium Iodide	2
Water	300

it will, after about one or two minutes, stain the epithelium a deep brown; but if there is a spot which does not take the stain, we can say that it is glycogen-free. Alcoholic tincture cannot be used, because of its coagulating effect. It damages the surface cells and then dyes them a dark brown. There are three kinds of glycogen-free fields, as follows:

1.—Carcinoma.
2.—Hardening of the epithelium due to:
   A. Prolapse
   B. Leukoplakia or
   C. Hyperkeratosis
3.—Trauma of the upper skin layers.

Two of these conditions, however, leukoplakia and hyperkeratosis, call for removal of the cervix, in the opinion of a great many gynecologists, because the majority of all such cases will eventually become malignant.

The chief advantages of this procedure are, first, its simplicity; second, its cheapness; third, it directs one to a portion of the cervix where a biopsy is to be made; and fourth, *it is positive for the absence of carcinoma on all exposed surfaces of the vagina and cervix.*

One should always bear in mind that this test does not rule out carcinoma in the cervical canal and the body of the uterus. If the patient has symptoms, such as irregular bleeding, and the test is negative in the exposed portion of the cervix, she should have a diagnostic curettage. The test in itself does not conclude that the patient has carcinoma. It merely directs one's attention to suspicious spots and the diagnosis of carcinoma must then be made by the microscope, from small portions of epithelium clipped from the glycogen-free area. As Schiller says in one of his papers, "Do not ascribe to it capabilities which it cannot have. *It is for use only in routine periodic examinations.* If symptoms are present and no glycogen-free areas are found, further search must be made."

Only a very small piece of epithelium is necessary in order to make the diagnosis. A small tissue punch can be used and one should be careful to include part normal epithelium and part pathologic. The tissue can be safely removed in the office. It is not necessary to send the patient to the hospital, and a piece of epithelium, ½ in. by ¼ in., is sufficient, although several of these may be taken at one time if desired.

Unless a frozen section is to be made, it is simplest to fix the tissue so removed in 10-percent formalin.

CHAS. E. GALLOWAY, M.D., F.A.C.S.
Evanston, Ill.

*Adapted from Bul. Evanston Br., Chicago M.S., May, 1933.

Common Errors in the Diagnosis of Rectal Tumors*

THERE are several factors in the examination of the rectum and sigmoid which, being neglected or misinterpreted, may lead to errors in diagnosis of tumors.

A negative finding, by fluoroscope or plate examination of a barium enema, is of no value. Although a cancer mass may almost completely obstruct the lumen of the bowel in the rectosigmoid region, the opaque material (owing to variations in the anatomic structure) passes through rapidly, filling the loops posteriorly and masking the filling defect from view.

An opaque enema which shows a defect is not sufficient to establish the true diagnosis, as to position and extent of the lesion. Due to the looping and mobility of the sigmoid, the lesion may appear in the plate to be above the reach of the proctoscope, and still be visualized at 5 or 6 inches.

If a tumor is above the rectum proper, the fecal stream may dribble through and fill the ampulla and the patient may still have fairly normal stools. If the mass is above the anorectal line, pain is usually a late symptom and is caused by the tumor encroaching upon surrounding tissues.

Bleeding may go unnoticed for many months or may be attributed to piles and, in the absence of pain, does not impress the patient sufficiently, and too frequently the doctor makes the mistake of treating for piles without a proctoscopic examination.

Bleeding frequently comes from polyps situated above the reach of the finger or anoscope. Single or multiple polyps, and even simple adenomas, often are precancerous or have definite malignant changes without giving important symptoms.

The finding of parasites in the stools of patients with bleeding has many times allowed a cancer to grow into an inoperable stage.

The shape of the stool means nothing and depends upon the tone and condition of the opening through which it has passed.

W. H. DANIEL, M.D.

Los Angeles, Calif.

*Am. J. Surg., Nov., 1932.

Self-Diagnosis of Diabetes

A MIDDLE-AGED man came to my office last summer and said that he had diabetes. I asked him how he knew such was the case. He replied that he had been superintending the building of a log-house in the woods, and every morning he went to a certain place in the brush to urinate. Soon he noticed that swarms of flies and bees collected at this place. Knowing that sugar in the urine was a symptom of diabetes, and having been in failing health for some time, he was induced to go to a hospital for a thorough examination. A well marked case of diabetes was revealed and insulin treatment produced the usual results.

K. K. CLARK, M.D.

Cable, Wis.

Transillumination of the Breast*

TRANSILLUMINATION is an aid in the diagnosis, interpretation and localization of certain lesions of the breast. The information which may be elicited by this method is most useful when considered in relation to the history of the patient and the findings on inspection and palpation.

Transillumination examination requires only a few minutes, and a large, totally-dark closet will suit for the purpose. The patient is placed in a sitting position and both breasts are examined. The light should first be placed under each breast and any opacities or shadows noted. The special part of the breast under suspicion is then examined by placing the lamp under the lesion in such a manner that the lesion lies between the light and the examiner's eyes.

The light should not be too intense and over-illumination should be avoided. The usual diagnostic lamps employed for transillumination of the sinuses are satisfactory.

Transillumination of the breast is of special value in three conditions: (a) the differential diagnosis between a solid tumor and a cyst containing clear fluid; (b) the diagnosis of hematoma of the breast; (c) the localization of duct papillomas, underlying the condition of bleeding from the nipple.

Transillumination of the breast does not permit a differential diagnosis between a benign and a malignant solid tumor, unless the benign lesion is a hematoma. Fibroadenoma and carcinoma cast shadows which are not distinguishable. The differential diagnosis between these states must be made by physical inspection or by the microscope.

One of the most useful fields for transillumination of the breast is in localizing the lesion in cases of bleeding from the nipple. The findings may be made to constitute a guide in the operative procedure. Transillumination also indicates the presence of

*Bull. Am. Soc. for Control of Cancer, Feb., 1933.

multiple papillomas, requiring either a wider operative removal or, in some cases, necessitating a local mastectomy.

MAX CUTLER, M.D.

Chicago, Ill.

Electrosurgery in Plastic Reconstruction of Neoplastic Diseases

ELECTROSURGERY has greatly reduced the number of "inoperable" cases in neoplastic disease. Three methods are available: coagulation, desiccation and excision of tissue, each of which has its distinct indication in treatment and no one of which should be confused with another, if the best plastic reconstruction is to follow.

By the combined technics of electrosurgery, neoplasms can be removed as dead tissue, instead of as viable cells. This can be done without hemorrhage and without shock, obviates infection and leaves a clean wound. The method is absolutely under the control of the operator, to effect as much or as little destruction as is indicated.

All superficial lesions, such as warts, moles, pigmented nevi, etc., are best treated by the desiccating or dehydrating current, which induces a minimum of secondary reaction in the tissues and subsequently results in a minimum of scarring.

GEORGE A. WYETH, M.D.

New York City.

Coramine in Denarcotization and Resuscitation*

IN SPITE of the obvious advantages of avertin as a basal anesthetic, it may produce unfavorable results on the respiration and circulatory depression.

In 110 operations, avertin was used for basal anesthesia and in the last 82 of these Coramine (a 25-percent solution of pyridine-beta-carbonic acid diethylamide) was administered intravenously routinely, in a dose of 2 cc., immediately on return to bed and also according to special indications.

Many favorable reports have been made regarding the use of Coramine as a respiratory stimulant and to overcome avertin depression.

Only 7 of the patients in the present series treated by Coramine received hypnotic medication the night before operation. All received morphine sulphate and atropine sulphate prior to avertin medication.

A careful record of the time of return of consciousness was made in cases not receiving routine Coramine and in the cases where it was used. In the first, the average time was 1 hour 25 minutes; in the second series 1 hour 48 minutes.

The toxicity of Coramine is low, so that large and repeated doses may be employed if the necessity exists. In 1 case of the present series, 28 cc. were given in a period of 16 hours, with apparently excellent results. In no case in the series was there evidence of depression after the immediate stimulation.

The use of Coramine is suggested in all cases where early recovery from anesthesia, especially avertin-gas-ether sequence, is desired.

PAUL M. WOOD, M.D.

New York City.

*Am. J. Surg., Oct., 1933.

Danger Signals in Cancer of the Stomach*

IN A FEW cases, a patient who has had more or less indigestion all his life, or for several years, will develop cancer of the stomach. But by far the commonest and most typical history of cancer of the stomach is the short one. The patient says, "Doctor, I never knew I had a stomach until this trouble began," or "All my life I could digest tacks, and now I cannot stand milk."

We must worry most about the indigestion that comes out of a clear sky, in persons past middle age who have been perfectly well for years. Cancer of the stomach is very rare before the age of thirty years and it is most common after the age of forty. Such a patient had better seek expert advice immediately and then follow it.

WALTER C. ALVAREZ, M.D.

Giving Liquids and Dextrose in the Home†

ONE of the most important parts of the treatment of most infectious diseases and certain gastrointestinal upsets is the problem of forcing fluids. In these conditions, in both children and adults, there is little desire for liquids.

The doctor should tell the family what he means by forcing fluids—whether he wants 6, 8 or 10 glassfuls taken in 24 hours. It is his duty also to make the fluid more palatable and pleasant for the patient. Recently, I have had very good results in getting patients to take carbonated drinks, particularly coca-cola. Many patients will drink 6 or 8 bottles a day. Children especially enjoy drinking out of a bottle. The individual's likes and dislikes must be taken into account; little

*Bull. Am. Soc. for Control of Cancer, Nov., 1933.
†Southern M. & S., Sept., 1933.

things that are important to patients are often overlooked by physicians.

In all cases with acidosis, fluids should be forced and dextrose given. Lately, I have used Karo syrup by mouth and am particularly pleased with the results. It is given in concentrated form (no water added) in doses ranging from 1 to 3 drachms every 2 or 3 hours. I have had several cases of gastrointestinal vomiting which were relieved by giving nothing but Karo syrup.

W. J. LACKEY, M.D.

Fallston, N. C.

[The manufacturers of coca-cola claim that it contains other things besides water, sugar, flavoring and CO_2—notably a considerable amount of caffeine. The use of a drink like this, to supply any considerable part of a large fluid intake, might have decided disadvantages, especially in children; though it is hinted that many southern babies are weaned on coca-cola.—Ed.]

Diet in Colitis

(A Typographic Error)

In the report of the International Postgraduate Medical Assembly, in the January issue of this journal, there appeared, on page 18, an abstract of a clinical lecture by Dr. James H. Means.

Dr. Means has called attention to a typographic error (a transposition of words) in the next to the last paragraph, where diet in colitis is discussed. The last lines of that paragraph should read: "A diet low in roughage and *high in proteins and vitamins.*"

Especial attention is called to this error, because it would be unfortunate if colitis patients should be starved of the proteins which they so badly need.

GEORGE B. LAKE, M.D.

Chicago.

Placental Extract in Prevention and Modification of Measles*

PROTEIN material extracted from human placentas contains substances which neutralize diphtheria toxin, blanch scarlet fever rashes, neutralize poliomyelitis virus and prevent measles in exposed, susceptible persons.

The extract is obtained from normal placentas under strictly sterile conditions. The placentas are incised repeatedly and extracted in the refrigerator with 2 percent solution of sodium chloride, decanted, centrifuged, concentrated, precipitated and dialyzed by the usual laboratory methods.

These placental extracts have been given as a prophylactic measure to 43 children who had not experienced measles, but who had come in contact with the disease. The extract was administered by intramuscular injection in doses varying from 3 to 10 cc., generally within 5 days of exposure.

In no case did the intramuscular injection appear to be without effect in either prevention or modification of measles in non-immune contacts and in no instance was there a general or local reaction or evidence of local infection following the injection. The effective dose was slightly more than the usual dose of convalescent serum.

CHARLES F. MCKHANN, M.D.,
and FU TANG CHU, M.D.

Boston, Mass.

Am. J. Dis. Child., 45: 475, March, 1933.

Paralgesia: Paravertebral Block for Relief of Pain*

THE term "paralgesia" is used to describe the method whereby analgesia is produced by paravertebral injections of alcohol. Intractable pain or pain associated with malignant conditions, can be treated by this method.

In paravertebral lumbar block, the segments which are to be injected are selected and wheals are raised with 1-percent procaine, 4 cm. from the midline on a level with the upper edge of the spinous process. Usually a 4-inch, 20-gage needle is inserted through the wheal, directed forward and about 30° medially, to reach the transverse processes. Procaine solution is continuously injected as the needle is slowly advanced. When the transverse process is reached, the point of the needle is passed above it and advanced 3 cm. farther, to reach the nerve. Induction of parasthesia is an indication that the nerve has been reached and that the needle is in an ideal position for injection. Two (2) to 3 cc. of 1-percent procaine is injected to palliate the pain of injection of alcohol. Five (5) to 10 cc. of 50-percent alcohol are then injected. The same technic is used in injecting the nerves in the other lumbar spaces.

S. VERNON, M.D.

Willimantic, Conn.

Am. J. Surg., Sept., 1933.

THUMBNAIL THERAPEUTICS

Treatment of Plantar Warts

IN THE writer's opinion, curettage is the best method of treating plantar warts. If a great many are present, a general anesthetic must be administered, but up to three or four may be removed under local anesthesia. The sole of the foot is cleaned with alcohol and 1 cc. of 4-percent procaine, with a drop of epinephrin, is injected into the base of each wart. The prick of the needle in this situation is often very painful, and this may be mitigated to some extent by freezing the spot with ethyl chloride spray. Anesthesia is complete in 4 or 5 minutes. The wart is then scraped out completely with a sharp Volkmann spoon. After-treatment consists in dressing the cavity daily with white precipitate (ammoniated mercury) ointment until it heals.—DR. J. L. FRANKLIN, in *Practitioner*, Lond., Oct., 1932.

Inhalation of Carbon Dioxide in the Paroxysmal Stage of Pertussis

INHALATION of carbon dioxide has been found effective in diminishing the intensity and abbreviating the duration of the paroxysmal stage in whooping cough. Between 6 and 7 percent mixed with air, or a mixture of 7 percent carbon dioxide and 93 percent oxygen, inhaled for 10 to 15 minutes either once or twice a day, preferably before a meal, has been found to fulfill the requirement.—DR. Y. HENDERSON, of New Haven, Conn., in *J.A.M.A.*, Aug. 30, 1932.

Fever-Production in Neurosyphilis

FEVER-PRODUCING methods are to be used in addition to the preparations of arsenic and mercury, because syphilis of the viscera, such as aoritis, is not materially improved by nonspecific measures. May I urge that the additional advantage that these nonspecific treatments offer a patient with neurosyphilis be borne in mind and that their use be recommended for patients who are not progressing favorably. The procedure should not be to wait until clinical signs of paresis are present, but the endeavor should be made to prevent general paresis by inducing fever treatment early. This will often arrest the disease when other measures fail. These methods should be employed, not only in cases of general paresis, but in selected cases of tabes dorsalis, cerebrospinal and vascular neurosyphilis and also in the asymptomatic types of neurosyphilis, in which benefit has not been derived from the usual treatment. —DR. P. A. O'LEARY, of the Mayo Clinic, Rochester, Minn., in *J. Chemother.*, July-Oct., 1932.

The Detmold Method of Controlling Inoperable Hemorrhage

THE DETMOLD method was based on the idea that, after a large loss of blood, the blood pressure being diminished and the clotting element of the blood increased, nature would check the bleeding. The method consists in applying ligatures to the limbs by a circular pressure to the upper parts of the arms and thighs, tight enough to check superficial venous circulation without affecting the deeper arterial influx of blood. When (pulmonary) hemorrhage has stopped, the ligatures are gradually loosened and the blood again allowed to re-enter the circulation.—DR. J. F. BALDWIN, in *A.J. of Surg.*, Aug., 1932.

Immunization Against Scarlet Fever

IN AN institution caring for more than 700 children, scarlet fever has been controlled by testing and immunizing all positives, according to the Dick method.

In no case have alarming symptoms followed the injection of five doses of toxin to each of 399 children.

Immunization is a safe and scientific method of controlling scarlet fever, and a more general use of the method should be encouraged.—DR. R. P. PEAIRS, of Normal, Ill., in *Illinois M.J.*, Sept., 1932.

Avertin Anesthesia in Gynecology

OF 300 surgical gynecologic patients preoperatively anesthetized with Avertin, 186 (62 percent) needed no other anesthetic; 114 (38 percent) relaxed insufficiently and had to be further treated with nitrous oxide or ether. The Avertin is administered as an enema. A 3-percent solution of Avertin fluid (1 cc. contains 1 Gm.), in distilled water, is measured out so that a dose of about 100 mg. for each kilogram of weight is given.—DRS. R. PETERSON AND JAS. M. PIERCE, in *Surg. Gynec. & Obst.*, Aug., 1932.

NEW BOOKS

Any book reviewed in these columns will be procured for our readers if the order, addressed to CLINICAL MEDICINE AND SURGERY, Medical & Dental Arts Bldg., Waukegan, Ill., is accompanied by a check for the published price of the book.

If I had to choose between the enjoyment of books and the ownership of a thick portfolio of securities, I should choose to be a reader.
—LITTLE JOURNAL FOR PEDIATRISTS.

Moore: Treatment of Syphilis

THE MODERN TREATMENT OF SYPHILIS. *By Joseph Earle Moore, M.D., Associate in Medicine, the Johns Hopkins University; Physician-in-charge Syphilis Division of the Medical Clinic, and Assistant Visiting Physician the Johns Hopkins Hospital, Baltimore. Springfield, Ill., and Baltimore, Md.: Charles C. Thomas. Price $5.00.*

By writing this timely volume, Dr. Moore has rendered the medical profession in general a valuable service. Its title is fully explanatory—the book is a discussion of all drugs used in the treatment of syphilis in all its manifestations and phases. The modern treatment of the disease dates from the discoveries of the five-year period 1905 to 1910, including the demonstration of the causative organism, the development of the Wassermann reaction, and the introduction of salvarsan.

The prevalence of syphilis makes it a matter of concern to the general practitioner and to specialists in every domain of medicine. What to do when the infection has been recognized is a matter especially urgent to the practitioner. Previously he could gain this information only from widely scattered contributions in the periodical literature, from expensive texts which deal with diagnosis and treatment alike, or from the advertising of pharmaceutical houses. Now it is different. Dr. Moore has simplified the matter, making all therapeutic information readily available. The book fills a great need and should become a well-thumbed source of reference and study on the desk of every physician who treats even an occasional case of syphilis.

Wolfe: Nervous Breakdown

NERVOUS BREAKDOWN: Its Cause and Cure. *By W. Béran Wolfe, M.D. Director, the Community Church Mental Hygiene Clinic, N. Y. New York: Farrar & Rinehart, Inc. 1933. Price $2.50.*

Dr. Wolfe, who wrote that interesting book, "How to be Happy Though Human," has prepared a straightforward, simply-worded treatise on that increasingly common condition which is popularly known as "nervous breakdown." Here he discusses its causes and symptoms; details a number of cases illustrating some of its varied types and the way to handle them; speaks some plain words to patients; and has good words to say regarding Creative Self-Realization.

The basic thesis of this volume is that "nervous breakdown" is a perfectly natural defense mechanism for protecting one from loss of "face" (necessary self-respect), and is liable to happen to anyone who meets a crisis in his affairs with which he is unable to deal adequately. The treatment is to help the patient to find the obstacle, study it, and discover some way to get around it or change his path of life so that it may be avoided.

Most general clinicians will find this book full of suggestions which will enable them to be helpful to a class of unfortunate patients which is, at present, and for the most part, very inadequately treated. If these people can be persuaded to read this book and to discuss it with their physician, who has also studied it, many will be able to give that cooperation which is essential to a successful and happy outcome.

Ridley and Sorsby: Mayou's Diseases of the Eye

MAYOU'S DISEASES OF THE EYE. *Revised and largely rewritten by Frederick Ridley, B.Sc., M.B., B.S., F.R.C.S., Assistant Surgeon and late Pathologist, the Central London Ophthalmic Hospital; and Arnold Sorsby, M.D., F.R.C.S., Hunterian Professor, Royal College of Surgeons, and Assistant Surgeon and Pathologist Royal Eye Hospital. Fourth Edition. London and New York: Humphrey Milford, Oxford University Press. 1933. Price $2.25.*

The popularity of Mayou's Diseases of the Eye has made a fourth edition necessary. The revising and rewriting of the volume has been done by the present authors at the request of Mr. M. S. Mayou. It is timely and is preferable to many of the other books now available on the same subject. Ophthalmology is constantly establishing new contacts with general medicine and the basic sciences and, while it retains its special technic it is

borrowing from biochemistry, physics and biology in no small measure. It is in the light of these newer tendencies that the present edition has been brought out, and the chapters on glaucoma, retinal diseases, heredity, and on the eye in general disease are illustrative of the changes that have been introduced throughout the book. The contents are divided into eighteen chapters, the last being devoted to operations. The first two chapters consider methods of examination and elementary optics and refraction. The other fifteen chapters are devoted to diseases of the eye and its component and adjacent structures, and to heredity and general disease in ophthalmology. The book is terse and time-saving and well-suited for use as a textbook.

Bassett: Mental Hygiene in the Community

MENTAL HYGIENE IN THE COMMUNITY. *By Clara Bassett, Consultant in Social Work, Division on Community Clinics, The National Committee for Mental Hygiene, Inc. New York, N. Y.: The Macmillan Company. 1934. Price $3.50.*

"Mental Hygiene in the Community" is a general outline of a program toward the adjustment of human beings to themselves and the world at large with a maximum of personal and social effectiveness and satisfaction. It points out that mental hygiene (mental health) is primarily and basically an individual matter, being applicable to society as a whole only through individual personalities. Inasmuch as the approach can only be made through the individual, it is necessary to understand that the physical, mental, emotional and social life of the individual are but aspects of one, indivisible, reactive whole, which is a dynamic and ever-changing intergration, sensitively responding and adjusting to all the various forces which play upon it. These main forces, which play upon the individual in every-day life, such as law, medicine, education, homes, nursing, social service, recreation and others, are treated as units in the book, showing how mental hygiene may be used most effectively by each agency in its dealings with the individual. The broadness of the subject-matter treated necessarily limits the book to generalizations; however an outline is given that will enable the dispenser of mental hygiene to shape his own work to fit the individual needs of the personalities dealt with.

J. R. C.

Medical Clinics

MEDICAL CLINICS OF NORTH AMERICA. *Philadelphia Number. Volume 17, Number 3, November, 1933. Philadelphia and London: W. B. Saunders Company. Issued serially, one number every other month. Per clinic year, July, 1933, to May 1934. Price: Paper, $12; cloth, $16.*

The November, 1933, number of Medical Clinics contains twenty-nine articles contributed by thirty-nine physicians of the hospitals and medical schools of Philadelphia. It opens with an article by Dr. C. Dudley Saul: "Epidemic Encephalitis Lethargica: With a Report of the St. Louis Epidemic of 1933." It is interesting to note that it is the first epidemic of large proportions in the United States. Other articles of especial practical importance are: (1) "Five Types of Hypopituitary Endocrinopathies," by Dr. Samuel A. Loewenberg; (2) "Coronary Thrombosis Simulating An Acute Surgical Abdomen. Report of Two Cases," by Dr. Henry K. Mohler; (3) "Inflammatory Diseases of the Arteries with Particular Reference to the More Acute Forms," by Dr. David W. Kramer; (4) "Quinine In the Pneumonias of Infancy and Childhood," by Dr. Myer Solis-Cohen; (5) "The Relationship of Cholelithiasis to Angina Pectoris," by Dr. Joseph G. Weiner; and (6) "Mercury Poisoning from Novasurol in Hypertensive Heart Disease," by Dr. Ferdinand Fetter. The other articles are all of more or less general interest, while some are of interest only to students of special diseases. The number adheres to the usual excellence of typography and binding. The contents will ensure it frequent use in every library.

Hamman: International Clinics

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Paediatrics, Obstetrics, Gynaecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and Other Topics of Interest. *By leading members of the Medical Profession throughout the world. Edited by Louis Hamman, M.D., Visiting Physician, Johns Hopkins Hospital, Baltimore, Md. Volume IV. Forty-third Series, 1933. Philadelphia, Montreal, London: J. B. Lippincott Company.*

Volume IV of International Clinics, 1933, contains eighteen articles contributed by twenty-one physicians, surgeons and dentists of the United States and Canada. Eleven of the articles are on Medicine, five on Surgery, one on Clinical Pathology, and one on Dermatology. The illustrations total fifty-two, including three colored plates. Three of the most practical medical articles are: (1) "The Rationale and Practical Aspects of Serum Treatment in Pneumonia," by Dr. Maxwell Finland, of Boston; (2) "Organotherapy in Pituitary Diseases," by Dr. T. B. Futcher, of Baltimore; and (3) "The Treatment of Obesity," by Dr. Russell M. Wilder, of the Mayo Clinic. The volume opens with Dr. Wilder's article, which considers diet, exercise and drugs as methods of reducing. In addition to Dr. Futcher's article there are five others on organotherapy, all of which are grouped as a practical consideration of the use of endocrine gland products in the treatment of disease. The articles on Surgery, Clinical Pathology and Dermatology are all of general interest. The dental articles are two in number: (1) "Diseases, Malformations and In-

juries of the Mouth and Associated Parts Occurring in Children," by Malcolm Wallace Carr, D.D.S., New York City; and (2) "Dental Disturbances in Children and their Significance to the Pediatrician," by Alfred Walker, D.D.S., New York City.

Bourque: Head and Spine Injuries

DIAGNOSIS AND TREATMENT OF HEAD AND SPINE INJURIES. *By Dr. Norbert Odeon Bourque, B.Sc., E. A. Seminarium; M.D., Universities of Lausanne (Switz.), Nashville and Tennessee; D.M.C., University of Paris; LL.D., Chicago College of Law; Surgeon-in-chief Lakeside Clinic and Post Graduate Hospital; formerly Head of Department of Surgery, Chicago Medical School and Jenner Medical College, and Councilor Chicago Medical Society; etc. Published by Lakeside Clinic and Post-graduate Hospital, Chicago, Illinois. 1933. Price $3.00.*

This monograph is a revised and elaborated arrangement of the notes which the author has used in teaching the subject for a period of over ten years. It has been published because the branch of surgery discussed is becoming more and more important, due to the mechanization of industries and high-powered transportation, such as autos, airplanes, etc.

The information presented is terse and practical and is drawn from the author's experience, from consultations with other surgeons in this field and from observations in their clinics. In addition, textbooks and current literature have been combed in order to present the latest phases in diagnosis and treatment. In discussing some subjects, the opposite methods of treatment advocated by some well-recognized authors are presented, leaving the reader to decide which he will use.

The book contains 181 pages of text and is divided into forty-nine sections with thirty-eight illustrations. It will be of interest to all surgeons and practitioners, and a good guide and source of reference to the latter in their handling of head and spine injuries.

Graham: Year Book of General Surgery

THE 1933 YEAR BOOK OF GENERAL SURGERY. *Edited by Evarts A. Graham, A.B., M.D., Professor of Surgery, Washington University School of Medicine; Surgeon-in-chief of the Barnes Hospital and of the Children's Hospital, St. Louis, Mo. Chicago: The Year Book Publishers, Incorporated, 304 South Dearborn Street. Price $3.00.*

The 1933 volume of General Surgery contains 826 pages devoted to all phases of surgery, from anesthesia, asepsis and anti-sepsis, to operations on all areas and organs of the body. It contains thirty-eight sections and carries 229 illustrations, a number of which are x-ray pictures. The introduction calls attention to some of the outstanding work of the year—work which the casual reader will want to review immediately in preference to other work which he can review later. One of these abstracts is of Ewing's work on biopsy in suspected carcinoma of the breast; another is the abstract of von Pannewitz's work on the treatment of 1,500 cases of arthritis deformans by x-rays; and still another is Phemister's report on continued thyrotoxicosis after complete removal of the thyroid gland. The section on cholecystography refers to a study of 2,070 cases; in addition, a rapid method of cholecystography is reviewed, which enables the gall-bladder to be visualized within an hour after intravenous injection.

The 1933 volume upholds all traditions of this Yearbook and is a well-planned and well-written treatise. Its place as a book of surgical reference is assured, both by its contents and by the name of its editor.

Maternal Mortality

MATERNAL MORTALITY IN NEW YORK CITY. A study of all puerperal deaths, 1930-1932. *By the New York Academy of Medicine Committee on Public Health Relations. Ransom S. Hooker, M.D., F.A.C.S., Director of the Study. New York: The Commonwealth Fund, 41 East 57th Street. 1933. Price $2.00.*

It is a matter of general knowledge that the maternal mortality rate in childbirth in the United States is unduly high, and this report is the result of an effort to place the responsibility for these unfavorable figures. The chief fault to find with it is that there appears to be a fairly general impression that the Committee which prepared it, like the Committee on the Costs of Medical Care, had preconceived opinions and arranged the figures to support them. Moreover, it seems regrettable (to say the least), that figures apparently derogatory to the skill of physicians should have been released to the newspapers.

One indication of this situation is that the Report states that figures for maternal mortality in the private hospitals were not available; while the president of the Association of Private Hospitals of Greater New York, in *The New York Medical Week* for Dec. 2, 1933, declares that these figures, which are much more favorable than those of the public hospitals, might readily have been obtained, if desired by the Committee.

Among the high points of the Report are the statements that the highest death rates occur in the special obstetric hospitals, where operative deliveries and cesarean operations are most frequent, and the lowest rates in home deliveries by physicians or midwives, being about the same for both.

It appears that insufficient stress is placed upon the fact that, when a midwife gets in trouble, she calls a physician, who signs the death certificate, if any; and that, when the physician encounters difficulties in the home, the patient is sent to a hospital, thus raising its mortality figures.

Responsibility for many maternal deaths

is placed upon the patients or their families, because of insistence upon anesthesia and rapid deliveries, necessitating the use of instruments.

The outstanding recommendations (with which most informed persons can agree, even though the Report appears to be biased) are: 1.—That the general medical profession be more adequately educated in obstetrics; 2.—that the public be educated regarding the value of prenatal care and the factors of safety in pregnancy and delivery; 3.—that more deliveries take place in the home; 4.—that the standards of hospitals handling obstetric patients be raised and enforced; 5.—and that provisions be made for the adequate training of midwives (to care for women who, for various economic and social reasons, are unlikely to call a doctor) and for better cooperation between them and the physicians.

Himalayan Research

JOURNAL OF URUSVATI HIMALAYAN RESEARCH INSTITUTE, Vol. III. *Published by Urusvati Himalayan Research Institute of Roerich Museum, 310 Riverside Drive, New York City. Price $1.35.*

Urusvati Himalayan Research Institute, located in the Himalayas, in India, is the farthest outpost of science and is doing valuable work in medical research, applied science, archeology and linguistics. The *Urusvati Journal*, a publication of this Institute, contains, in its third volume, an article by Prof. S. Metalnikoff, of the Pasteur Institute in Paris, on the importance of the skin in the preservation of health; a scholarly treatise on the Tibetan language, its phonetics, diction, and selections of native poetry, by Dr. George de Roerich, director of the Urusvati Himalayan Research Institute; Professor J. M. Benade gives a detailed account of the findings of a cosmic-ray expedition to southeastern Ladakh, Tibet. Other articles include: "Recent Archeological Discoveries in India," by Col. A. E. Mahon, and "The Possible Significance of Heisenberg's Principle of Indeterminacy to the Chemistry of Physical Matter."

The work is illustrated with excellent photographs, and should prove stimulating to physicians and others who are interested in the rather unusual subjects discussed.

Oehlecker: Blood Transfusion

DIE BLUTTRANSFUSION. *Von Prof. Dr. F. Oehlecker, Hamburg. Mit 43 Bildern in Text. Berlin, Germany: Urban & Schwarzenberg, Friedrichstrasse 105 B. 1933. Price Geh. RM 4.-, gebd. RM 5.20.*

This is a practical and well-illustrated manual on an important subject, and should be decidedly helpful to physicians who read German.

Surgical Clinics

SURGICAL CLINICS OF NORTH AMERICA. *Pacific Coast Number. Volume 13, Number 6. Index Number. December, 1933. Philadelphia and London: W. B. Saunders Company. Issued serially, one number every other month. Per clinic year, February, 1933, to December, 1933. Prices: Paper, $12; cloth, $16 net.*

The December, 1933, number of the Surgical Clinics of North Amercia contains forty-three articles contributed by thirty-seven surgeons of the medical schools and leading clinics and hospitals of Washington, Oregon and California. Some of the more interesting articles are: (1) "Wandering Spleen," by Drs. Lawrence Eder and Rexwald Brown; (2) "Successful Repair of Stensen's Duct," by Drs. Edmund Butler and Edward Guinan; (3) "Treatment of Cervical Spine Dislocation," by Drs. C. F. Eikenbary and John F. LeCocq; (4) "Foreign Body Removed From The Abdomen After Eighteen Years," by Dr. R. D. Forbes; (5) "Multiple Fecal Fistulae," by Dr. O. F. Lamson; (6) "X-ray Burn of Leg; Value of Broth Injections," by Drs. J. Tate Mason and Joel W. Baker; and (7) "Inguinal Hernia, Strangulated, Containing a Meckel's Diverticulum," by Drs. Alanson Weeks and Otto H. Pflueger. The other articles are also of as much practical value, making this number one of the most praiseworthy of the year. The concluding twenty-seven pages of the text consist of the index to Volume 13, which comprises the February, April, June, August, October and December, 1933, numbers.

Gardner: Bacteriology

BACTERIOLOGY FOR MEDICAL STUDENTS AND PRACTITIONERS. *By A. D. Gardner, D.M., F.R.C.S., Fellow of University College, Oxford; Member of Research Staff, Medical Research Council. London and New York: Humphrey Milford, Oxford University Press. 1933. Price $2.25.*

This is a new book, the chief aim of which is to present shortly, readably and relevantly as much of the vast subject of bacteriology as a medical student or practitioner needs to know; leaving details of technic to a practical course and emphasizing the wider biologic relations of microbe and man. This method of presentation may help to correct the feeling, surprisingly common among medical students, that bacteriology is a dull subject. Such an impression, of course, can arise only from faulty presentation, from the attempt to inculcate too many facts and the failure to make them sufficiently interesting and relevant to the student's purpose in life. Dr. Gardner's presentation will go far toward making bacteriology one of the most interesting subjects of the medical course.

MEDICAL NEWS

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Nursing Service Under Difficulties

THEY had a big blizzard up in New Hampshire about Christmas time and, while the snow was so deep that all other methods of transportation were out of commission, a woman, about to be confined, wanted a nurse; so Mrs. John M. Seeley, of Chinook Kennels, Wonalancet, hitched up her trusty dog team and took Nurse Beatrice Coots to the place where her services were needed and brought her home.

There is still some romance in the practice of the healing art, after all.

Vitamin Research

THE Abbott Laboratories have just added to their plant at North Chicago, Ill., a large, modern, air-conditioned building for research on vitamins and other problems of nutrition.

Therapeutic Research

THE Merck Institute of Therapeutic Research has just appointed, as chief bacteriologist, Dr. Eugene Maier, graduate of the Universities of Tübingen and Erlangen, Germany, and formerly with the Rockefeller Institute and Bellevue Hospital, New York.

Food and Nutrition Playlet

THE Evaporated Milk Association has prepared a rather striking little one-act play entitled "The Airplane Rescue," emphasizing some of the advantages of evaporated milk, which can readily be produced by school children of the elementary grades or similar groups.

A letter addressed to the Association, at 203 N. Wabash Ave., Chicago, will bring a copy to anyone who is interested.

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American "Siamese" Twins

THESE attractive pelvipagic twins, Daisy and Violet Hilton, born in England and now living in San Antonio, Texas, are shown in the act of becoming American citizens by taking the oath of allegiance.

This form of congenital abnormality, while decidedly rare, is not now considered unique, as it used to be when it received the popular name by which it is still known.

HAPPINESS

Happiness involves choice. Human beings are never happy until they have had an opportunity to experiment and choose.—Little Journal for Pediatrists.

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TO ASSIST doctors in obtaining current literature published by manufacturers of equipment, pharmaceuticals, physicians' supplies, foods, etc., CLINICAL MEDICINE AND SURGERY, Waukegan, Ill., will gladly forward requests for such catalogs, booklets, reprints, etc., as are listed from month to month in this department. Some of the material now available in printed form is shown below, each piece being given a key number. For convenience in ordering, our readers may use these numbers and simply send requests to this magazine. Our aim is to recommend only current literature which meets the standards of this journal as to reliability and adaptability for physician's use.

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S-504 Bedtime Nourishment. Mellin's Food Co.

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S-596 The Pneumonic Lung. Its Physical Signs and Pathology. The Denver Chemical Mfg. Co.

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S-672 Inflammation and Congestion. Numotizine, Inc.

S-699 The Illinois Post Graduate Medical School Bulletin. The Illinois Post Graduate Medical School, Inc.

S-718 For more than 25 years the Dental and Medical Profession have recommended Revelation Tooth Powder. August E. Drucker Company.

S-719 Tetanus-Perfrigens. (Tetanus Gas-Gangrene) Antitoxin. The National Drug Company.

S-720 National Hay Fever Antigens. The National Drug Company.

S-725 *The Hormone* — January, 1934. The Harrower Laboratory, Inc.

S-737 Descriptive Booklet. Od Peacock Sultan Co.

S-742 Dilaudid a Morphine Derivative. An Advance in Opiate Medication. Bilhuber-Knoll Corp.

S-744 Effective Inhalation Therapy. Vapo-Cresolene Co.

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S-752 Fourth Edition of Diagnosis of Genito-Urinary Diseases and Syphilis. Od Peacock Sultan Co.

S-758 Actual Experiences with Endocrine Toxemias. The Harrower Laboratory, Inc.

S-759 From "Poultesse" to "Cataplasm-Plus." Numotizine, Incorporated.

S-761 For the Failing Heart of Middle Life —Theocalcin. Bilhuber-Knoll Corp.

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S-799 Whooping Cough Successfully Treated with Elixir Bromaurate (Elixir Gold Tribromide). Gold Pharmacal Co.

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